



"POSITION IS EVERYTHING."

This is the Best Position
in the
Best California Medical Medium!

DO YOU WANT IT?

The Outcome of Age.

There are many conditions of
advancing life in which

Fellows' Syrup of Hypophosphites

is beneficial, viz:-

DISEASES OF THE

Assimulative Organs.

Circulatory Organs.

Respiratory Organs.

Nervous System.

The value of a *stimulant* in the enfeebled digestion of the aged has been recognized from the earliest time.

For those who decline to accept the aid of wine, and who *need something* of a stimulant character to rouse the flagging powers of digestion, Fellows' Syrup of Hypophosphites offers special advantages. In all conditions commonly met with in persons of advancing life, a tonic like *Fellows' Syrup* is clearly indicated.

Dr. Mitner Fothergill wrote: It (Fellows' Hypophosphites) is a *good* all-around tonic, especially indicated where there is Nervous Exhaustion.

Special Notice. *Fellows' Syrup* is advertised only to the Medical Profession, is never sold in bulk, and physicians are cautioned against worthless substitutes.

Medical letters may be addressed to

MR. FELLOWS, 26 Christopher Street, New York



AS A CHAIR

EAMES TRICYCLE CO.,

Patentees and Manufacturers of Up-to-Date

APPLIANCES FOR INVALIDS.

The cuts show one of our many features and attention is directed to the various positions in which this chair can be used. Manufacturers of

The Eames Tricycle Chair,

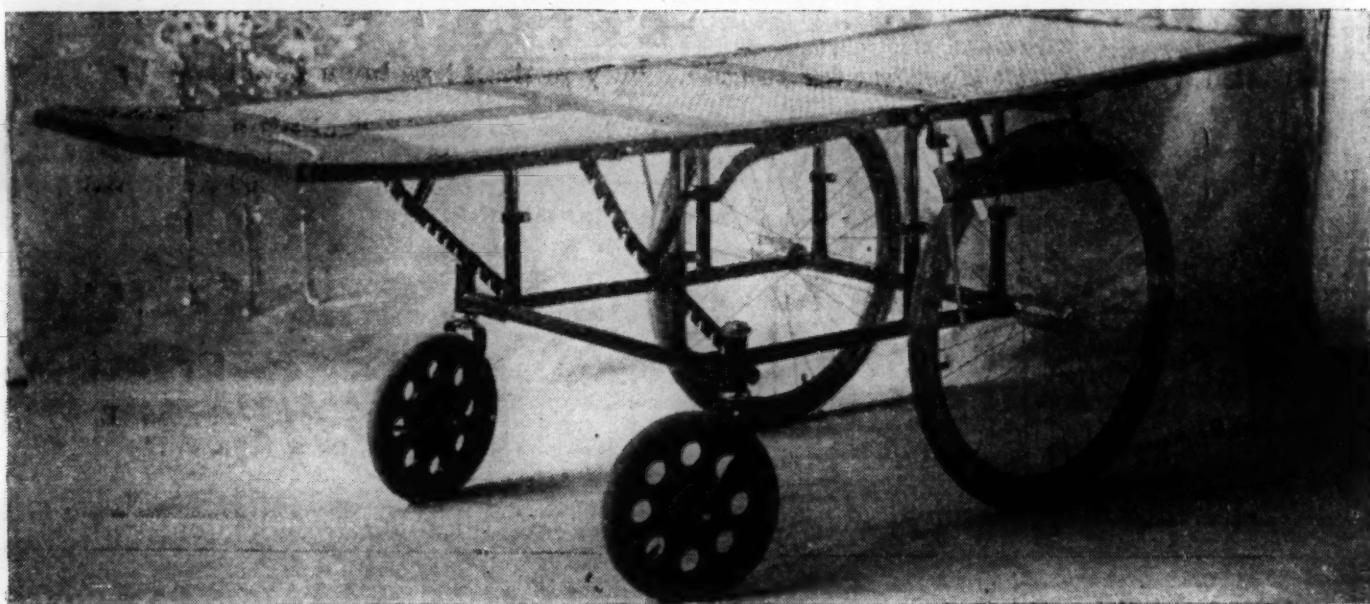
FOR SELF-PROPELLING.

Chairs sold, rented and exchanged.

2024 Market St., San Francisco.

Telephone PAGE 1471.

Write us for Catalogue, furnished free on application.



AS A COUCH

A. ISAACS.

I. HARBER.

Harber & Isaacs, MERCHANT TAILORS.

First-Class Work,
Perfect Fit,
Samples Sent on Request.

Rooms 3 and 4.

850 Market Street,

COR. STOCKTON,

San Francisco.

Phone, Brown 202.

ALEX. W. WHELDEN, Carpet-Beating Machine and Renovating Works.

2400 GEARY ST., Cor. Baker, San Francisco.

Carpets cleaned by my process are freed from grit, moths, etc., the nap is raised, colors brightened, giving them the appearance of new carpets. Bordering and refitting carpets a specialty.

Carpets taken up, beaten and re-laid in one day, if necessary. Having the very best and latest improved machinery, you may rely on having your work done well.

Telephone WEST 93

Hopeless - Cases - of - Impotency!

are yielding to

PIL ORIENTALIS (Thompson) Has Stood the Test 10 Years

Contains the Extract Ambrosia Orientalis (India) imported solely by ourselves and is the green bark from the Tyunjahb of Siam and India, and the Gorrah or Yooimbee of the East Coast of Africa.

Dr. C. H. H., Whitinsville, Mass., "I believe Pil Orientalis is the nearest to being a specific for impotency of anything ever recommended."

Dr. W. H. J., Danielson, Conn., "Gave satisfaction in a case where everything else had failed"

Dr. G. W. S., Clayton, Ind., "Relieved a case of impotency of fourteen years standing"

Dr. P. D. P., Hartford, Conn., "Succeeded far beyond my expectations"

Dr. M. R. L., Aquasca, Md., "Used on an old gentleman over seventy years of age for functional impotency, with decided benefit"

Dr. C. H. Latimer, Gov't Hospital for Insane. "My patient has been benefited by 'Pil Orientalis'."

Formula {	R Ambrosia Orientalis (India)	gr 2	Nitrate Strychnine	-	gr 1.450
	Extract Saw Palmetto	- gr ¼	Strychnos Ignatia	-	gr 1.40
	Zinc Phosphide	- gr ½	with Capsicum and Aromatic powder.		
	Dose—One pill or two after each meal, and before retiring.				

PRICE:—\$1 per box [plain label for dispensing] \$9.50 per dozen, net.

The Immune Tablet Co., Washington D. C., U. S. A.

Agents

REDINGTON & CO., San Francisco.

F. W. Brain, of Los Angeles and San Deigo, Cal.

East Las Vegas, New Mexico, E. G. Murphy

Agent for Old and New Mexico, J. R. Ribera, Pajarito, New Mexico.

Physicians

Chicago Artificial Limb Co.

36 Geary St., San Francisco.

Established 28 years.

Recommended by 500 Hospitals, comprising those in this country, Mexico, Japan and British Columbia. We are the only company issuing a Refund Receipt—to the effect that if we fail to fit the limb the deposit is returned.

A SPECIAL CATALOGUE

Intended for Physicians, will be mailed to your address on application

Faber & Co., Groceries and Liquors

❖ **20 SPECIAL PRICES WEEKLY.** ❖

COFFEE JAVA AND MOCHA, BROKEN, 3 POUNDS, **50c.**
STANDING SPECIAL.

WHISKEY FINE OLD BOURBON, LARGE BOTTLE, **55c.**
REGULARLY 90c.

Phone, Howard 1021

119 Taylor Street, San Francisco, Cal.

HAGEE'S CORDIAL

OF COD LIVER OIL

With Hypophosphites of Lime and Soda.

Is a preparation that combines all the potent elements of Cod Liver Oil in a form pleasant to take, and acceptable to the weakest stomach. **No Grease, No Fishy Odor,** No Digestive Disturbance. When Cod Liver Oil Treatment is indicated, prescribe

Gord. Ol. Morrhea Comp. (HAGEE),

IN ORIGINAL 16 Oz. Bottles

It is Never Sold in Bulk

Katharmon Chemical Co., ST. LOUIS, MO.



HEINECKE BROS.

Grocers and Wine Merchants,

S. W. Cor. Collingswood and 18th Sts., S F.

Telephone, Blue 866.



HALSTED & CO.,

UNDERTAKERS

and EMBALMERS

946 Mission Street

SAN FRANCISCO, CAL.

Telephone, South 163

California Medical Journal.

The Largest Journal West of Chicago Devoted Entirely to Medicine and Surgery

H. Bosworth Crocker, M. D., Editor and Manager.

\$1.50 per Year, in Advance

Editorial and Press Rooms,
1422 Folsom Street, San Francisco, Cal.

Published Monthly in the Interests of the
California Medical College.

Editor's Hours, 10 to 12 Daily.

Entered at the San Francisco Post Office as Second-Class Matter.

Contents.

ORIGINAL AND SELECTED.

THE BUGS OF THE BOGS.....	M. H. Logan, Ph. G., M. D.	343
HOSPITALS OF PARIS.....	O. C. Welbourne, M. D.	346
DAUCUS PUSILLUS.....	W. C. Shipley, M. D.	348
THE VARIOUS SCHOOLS OF MEDICINE.....		349
ABDOMINAL SURGERY.....	H. A. Royster, A. B., M. D.	351
SURGERY.....		359
ELECTRO-THERAPEUTICS.....		361
GYNÆCOLOGY.....		363
EYE, EAR, NOSE AND THROAT.....		365
Review, 367; Personal, 372; Editorial, 373; Book Notes, 377; Publish'rs Notes		379

THE Equitable Life Assurance Society of the United States

"Strongest in the World"

The Best investment—The Cheapest
Life Insurance—are found in the
Endowment • Fund • Policy

Issued by the *Equitable Life*. For full information fill in and forward coupon attached to
A. M. SHIELDS, Manager, Room 7, Crocker Building, San Francisco

WITHOUT committing myself in any way to a purchase, I shall be
pleased to have you send me further particulars regarding the new

Endowment Bond Policy of the Equitable Society.

Please base your figures on a block of Bonds for \$.....

issued to a purchaser whose age was.....on his last

birthday, on the.....day of.....

(Name in full).....

(Address).....

Dated at.....the.....day of.....1901.

Mention this Journal.

WHEN THE STOMACH REFUSES

food and nourishment, when intestinal or gastric inflammation render the stomach entirely unavailable, or inadequate, try

BOVININE

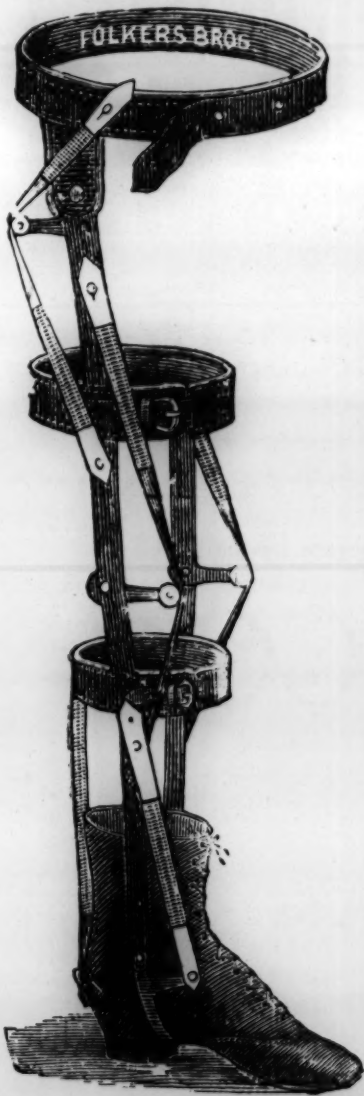
per rectum. It will nourish and support, and aid any form of medication.

When collapse calls for *instantaneous blood* supply—try it by sub-cutaneous injection of one part to two of neutral salt solution, and note the prompt response, a response so much more efficient and powerful than that from blood dilution. If you are interested a postal will bring our scientific treatise on topical and internal administration, and reports of hundreds of clinical cases.

THE BOVININE CO.,

75 West Houston St., New York.

LEEMING MILES & CO., MONTREAL. Sole Agents for the Dominion of Canada.



TELEPHONE 786.

J. H. A. FOLKERS AND BRO.

IMPORTERS OF

SURGICAL INSTRUMENTS

AND

DENTAL GOODS.

MANUFACTURERS OF

TRUSSES and APPARATUS for DEFORMITIES, Etc.

DEALERS IN FINE CUTLERY, ETC.

815 MARKET STREET, (Academy of Sciences Building,

SAN FRANCISCO.

Sole Agents for **GEO. TIEMAN & CO** NEW YORK

Herreshoff The Famous Boat Builder Endorses Dr. Deimel's Underwear

Here is What He Says About It:

In Bristol, R. I., Jan. 12, 1901.
DEAR DR. DEIMEL:—I am glad always to speak a good word for your Linen-Mesh. Neither you nor anyone has ever overstated its advantages in the way of comfort or healthfulness, and surely it deserves to be worn and valued by the intelligent ones of the community. LOUIS HERRESHOFF.

We have hundreds of similar testimonials from men in every station in life—Sankey the Evangelist, Dr. Kellogg of the Battle Creek Sanitarium, J. L. Milton Senior Surgeon of St. John's Hospital, London, and others.



All genuine Dr. Deimel Undergarments bear this Trade Mark.
Sample pieces and literature sent free by addressing

The Deimel Linen-Mesh System Co.

491 Broadway, New York

San Francisco, Cal.
111 Montgomery st.

Washington, D. C.
723 15th st., N. W.

Montreal, Can.
2202 Catherine st.

London, E. C. Eng.
10-12 Broad st.

The well known manufacturers of Surgical Dressings and Supplies, J. ELLWOOD LEE CO., Conshohocken, Pa., have the exclusive manufacture and sale of Surgical Dressings, Supporters and Suspensories made of Dr. Deimel Linen-Mesh.

A Directory of
Physicians
of all
North America

Improved, Comprehensive,
Up - To - Date.

The Standard Medical Directory

THIS GREAT WORK, now in active preparation, will have many attractive and superior features. Supplementing the directory of physicians will be Nine Associated Directories, comprising everything in the world of medicine.

Every physician should have a copy. It will be issued in one volume of about 1000 imperial octavo pages, good paper, bound in handsome library style. Send for Prospectus

G. P. ENGELHARD & CO., Publishers, 358-362 Dearborn St., CHICAGO

Established 1858

Telephone South 47

CRAIG & COCHRAN CO.

(W. A. Stephens, Manager)

Funeral Directors and Embalmers.

Lady Assistants
Spacious Chapel
for the use of our patrons

52-56 Mint Ave,

San Francisco, Cal

"Anæmia

is the sneak thief
of all diseases."

It steals on insidiously,
frequently carrying in its
wake the beginnings of
di-ease of more serious
import.

"Oppose beginnings,"
is an old and true proverb.



Pepto-Mangan ("Gude")

by furnishing the blood with an immediately absorbable combination of **Organic Iron** and **Manganese**, increases the oxygen and hæmoglobin carrying power of the red corpuscles and thus nourishes all the tissues of the body. It should be employed in cases of

ANÆMIA, CHLOR-ANÆMIA, CHLOROSIS, RACHITIS, NEURASTHENIA,
or in **BLOOD IMPOVERISHMENT** from any cause.

To assure proper filling of prescriptions, order Pepto-Mangan "Gude" in original bottles (¾ xi).

IT'S NEVER SOLD IN BULK.

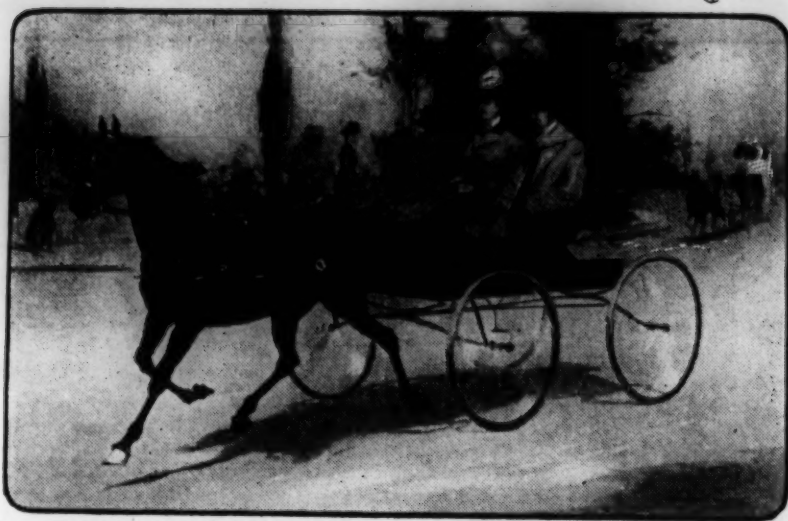
Send for samples and literature to

M. J. BREITENBACH COMPANY,

Agents for American Continent.

LABORATORY,
LEIPZIG, GERMANY.

100 WARREN STREET, (Tarrant Building), NEW YORK.



PNEUMATIC RUBBER TIRES

save many a jolt and jar. With careful use they are DURABLE.

Physicians' Buggies,

with or without top, with solid or pneumatic rubber tires, as preferred
 ❖ CATALOGUES FURNISHED.

Studebaker Bros.' Mfg. Company,

MARKET AND TENTH STREETS,
 SAN FRANCISCO.

J. GORDAN THE TAILOR
 1122-1124 MARKET ST.
 San Francisco, Cal.

ALL THE LATEST NOVELTIES

First-class Workmanship

Moderate Prices

Perfect Fit

DISSOLVE ON THE TONGUE Antikamnia & Heroin Tablets

(5 GR. ANTIKAMNIA, 1/12 GR. HEROIN HYDROCHLOR.)

A RESPIRATORY STIMULANT, SEDATIVE, EXPECTORANT AND ANALGESIC
 IN THE TREATMENT OF
 COUGHS, BRONCHITIS, LARYNGITIS, PNEUMONIA, DYSPNOEA, PHTHISIS, CORYZA,
 WHOOPING COUGH, ASTHMA, HAY FEVER, COLDS, ETC.

DOSE: ONE TABLET EVERY TWO, THREE OR FOUR HOURS AS INDICATED

- SAMPLE BOX FREE TO PHYSICIANS -
 ADDRESS

THE ANTIKAMNIA CHEMICAL COMPANY-ST. LOUIS, U.S.A.

CALIFORNIA MEDICAL JOURNAL.

Vol. XXII.

OCTOBER, 1901.

No. 10.

The Bugs of the Bogs—A Theory of Malaria.

M. H. LOGAN, PH. G., M. D., 10 GEARY STREET, SAN FRANCISCO, CAL.

Professor of Chemistry, California Medical College.

THROUGHOUT the atmosphere, the water, and the earth, there are myriads of living organisms, both animal and vegetable, living, growing, dying, decaying, every hour; almost every minute measures the span of life of some of these microscopic organisms. Every respiration of a human being inhales 1,500 to 14,000 of these beings, most all of which are very common and perfectly harmless. They are called physiological or non-pathogenic bacteria. There are, however, a few, a dozen, more or less, thought to be pathogenic, and are said to be specific to certain conditions. Different varieties inhabit different localities. In marshy districts and about stagnant pools, a large variety exists, most of which are non-pathogenic. On high mountains and in extremely cold regions very few in kind and number are found. (In Hudson River ice 398 colonies have been found in 1 CC.) In ordinary fresh still water there are about fifty varieties of bacteria, most of which are bacilli. They are long or rod-like in appearance, hence their name. They are found everywhere,

but they propagate in water. They are mostly of a vegetable nature and lead a parasitical life on the bodies of higher organisms. The round or discoidal microbes found so frequently associated with these are known as cocci.

The average bacteria is one-twenty-five thousandth of an inch in length, entirely invisible to the naked eye. Some generations live from fifteen to forty-five minutes under favorable conditions. They propagate so extremely rapidly that three days will produce 4,772 billions in number, with a weight of 7,500 tons. The average weight of one individual is one billionth of a mgrm.

Most all still water contains bacteria in form and size sufficient to be seen with the naked eye, or a low power magnifying glass, these are known as spheres, rods and spirals. Common slowly moving river water has from 20,000 to 50,000,000 of ordinary bacilli to 1 CC.

Dead organic matter naturally tends to decompose. If it be of vegetable nature, it ferments; if of animal, putri-

faction results. Vegetable matter is composed of hydrocarbons and carbohydrates with certain proximate principles. When decomposition takes place, such products as the following appear: carbonous oxide CO, carbonic oxide CO², hydrogen sulphide H₂S, marsh gas CH₄, ethane C₂H₆, etc., the vapor of alcohol, succinic acid and glycerine. After their evolution, these begin to oxidize, forming ethers, aldehydes, acids and their salts, like formic, acetic, butyric, and many other aldehydes and acids, with numerous simple and compound ethers and side salts. Warmth and moisture are necessary conditions.

Animal matter decomposes by way of putrefaction. Animal tissues contain nitrogen, it being a proximate principle of all albuminoids or proteids. The higher organized the animal tissue, the more prone to decomposition is its complex arrangement. Putrefaction means the formation of lower organic compounds of the nitrogen group. They are known as amides, amines, etc., the first of which is methylamine CH₃ NH₂. It is the simplest organic base. There is a regular homologous series of such, like di-methylamine (CH₃)₂N, and tri-methylamine (CH₃)₃N, mono, di and tri ethylamine, the same with mono, di and tri propyl, butyl and amyl amines, and others higher in the series. Amongst the higher ones, we find some such as putrescin, tyro-toxin, Cadaverine Saperin, etc. They are variously known as toxins, antitoxins, leucomaines and ptomaines. The lower ones are mainly gaseous; the higher are liquid and

solid. Along with retrograde evolution of organic matter, either animal or vegetable, there is more or less disintegration and floating away of the finely divided particles of the original substance.

An inherent characteristic of water is vaporization and diffusion; the same with the products of decomposition, the gaseous products are mostly very diffusive. Early and late in the day, when the temperature of the air and the ground are quite different, a vapory cloud may be seen to arise from stagnant pools and marshes. Now let us see what it may be composed of:

1st. Air, a mixture of nitrogen and oxygen with minute quantities of other normal gases.

2nd. The vapor of water, steam.

3rd. The products of fermentation, the vegetable gases and vapors mentioned above.

4th. The products of putrefaction, comprising that long list of amide compounds, too numerous to repeat.

5th. The numerous and intricate combinations between the products of fermentation and putrefaction, vastly augmenting the number with compound esters.

6th. Finely divided particles of vegetable and animal fiber—tissue, hair, epithelium, etc., fruit essences flower odours, pollen and spores.

7th. Amorphous granular matter, unclassified inorganic substances—dust.

8th. And last, and also probably least, is that microbic life characteristic of the region—bacteria, which are mostly bacilli, arising and being held

in suspension by the vapour and various gases. In swampy lagoons and marshy regions, the bacteria are principally bacilli colli communis, bacilli pyogens, and saprophytes. Taken together all of this innumerable variety of matter is known as effluvia or miasma. As this heterogeneous vapory mass arises, it diffuses, as vapor must by its own law, and as it permeates distant regions, it thins and falls, wind may carry it to other distant parts. It settles on all surfaces and awaits a rain to wash it back to its original home, or other convenient place.

When an individual remains long in such an atmosphere, his normal vitality is gradually reduced. This follows necessarily from the fact of the oxygen being first exhausted by reacting with and splitting up of the primary compounds, then recombining and oxidizing the same into various modifications. This deoxygenated polluted air can no longer sustain the blood, hence it degenerates, and the system becomes vulnerable. Three or four per cent. of the bacteria are so persistent that they are called pathogenic or specific. Now if one lives in, sleeps in, eats, drinks and breathes in all this vast mass of matter and microbes, it will soon break the system. In its new home, the bacilli grows a crop, hence a chill, then the system reacts, hence a fever; then a rest, to be repeated again and again indefinitely, or until one or the other succumbs, the microbe or the man.

The human system always has some bacilli colli communis in a perfected stage of development, but not enough

to do any harm, in fact, they take a physiological part in the last stages of digestion. Before they reach a perfected stage of development, however, they are very destructive to animal tissues. Being persistent they develop at the expense of any other tissue. When they tend to increase in numbers too rapidly, the so-called phagocytic action of the white blood cell dissolves them and thus keeps the normal balance. But if an attack of a whole bacillus colli colony occur upon a devitalized system, the bacilli takes the field. If the mucous membrane be abraded, these, then, penetrate the tissue and, if in very great numbers, the attack will make a profound impression upon the whole system. The constant struggle to throw them off will cause a high continued fever. If the mucous membrane further weakens, many bacilli will congregate at such places and ulcerate the part. This frequently occurs at Peyers glands. The phagocytic cells are soon overpowered and then the blood becomes a decomposing mass of living and dead bacilli and their offal. Malignant typhoid and the simplest malaria differ only in degree. If the system be very strong and gradually accustoms itself by a sort of toleration, then somewhat of an immunity may be established. If an antidote be given, it must be strong enough to destroy the bacilli and purify the blood, before it can do any good, in which case, it will also damage the tissue and reduce the already low power of resistance still lower.

The chill and fever are largely the result of the life processes of the

bacilli. They sap the vitality of the blood. When the vitality is very low, the nitrogenous portion of the blood tends to decompose by putrification, the starchy and sacchrine part by fermentation. This makes the whole system somewhat like a cesspool in which the happy microbe finds a congenial hibernation. Some microbes are said to be animal in nature. When they ingest the human blood as their pabulum, they must excrete a certain portion as excrementitious matter, like any other animal or man. This offal is sometimes called toxin or tox-albumen. It is itself a poison and assists

in farther devitalizing the human victim.

If a patient has sufficient vitality to recover, a long period of weakness is sure to follow. This condition is called autointoxication, and yet it is a true toxemia. If a patient absorb only slightly, then remove to a more salubrious climate, he may recover in a short time perfectly.

Water which is impregnated with carbonates, and most water is, favors microbial growth and decompositions.

Read before National Eclectic Medical Association, Chattanooga, Tenn., 1901.

Hospitals of Paris.

O. C. WELBOURN, M. D., LONDON, ENG.

(Formerly of Long Beach Cal.)

THE Assistance Publique annually expends nearly \$8,000,000 on its various benevolent institutions which assist about 467,000 persons each year. It controls twenty hospitals, which provide an aggregate of upwards of 12,000 beds. Over 100,000 persons are admitted each year, and the death-rate varies from 10 to 15 per cent.

These hospitals are, of course, scattered all over the city, though an effort is made to make them convenient to the poor. Each one is surrounded by its garden, and this in turn by a high stone wall, so that, externally, one is about as good as another. But when we see the furnishings and appli-

ances of these hospitals the variations are startling, and in each instance the visitor sees written everywhere and in no uncertain hand the theory and practice of the medical man in charge. One man strives for asepsis, the second strives for a great number of patients, while a third is indifferent to both ambitions and just lets things slide. Here in a Paris hospital I have seen chloroform administered by means of a square of heavy cotton stuff folded to eight thicknesses, saturated with chloroform, laid over the nose and mouth and pressed firmly down by a pair of brawny hands. It was difficult to see how asphyxiation could be

avoided even if no chloroform were used.

However, this seems to be the regular method at this particular hospital, for I have seen it done in this manner six consecutive times by as many different administrators. Greatly to the surprise of the respective administrators four of these cases suddenly developed a bad collapse with suspended respiration, lividity, etc. I can never forget my first experience of this kind.

The professor, who was busy arranging his instruments, was the first to discover that the patient had ceased to breathe. Instantly came the sharp word of command. An interne sprang forward, grabbed a pair of double-toothed uterine tenaculum forceps, hitched on to the patient's tongue and jerked it out of her throat with such force as to tear the end off. At a second trial the forceps tore out, and a third trial was equally unsuccessful, but the interne did not lose heart. However, the patient was losing her tongue piecemeal, so the professor took the task unto himself, relinquishing the artificial respiration act to another interne. This interne had to be relieved, because he persisted in trying to make the patient breathe 60 or more times per minute, and it was not until a fourth man was on trial that it was done with reasonable accuracy.

By and by there came a short gasp, a flush of color, and the patient was alive again. Great was the rejoicing and numerous the congratulations. Some minutes later an interne rushed

in with a bag of oxygen under his arm and was surprised to see that he was too slow. In this case there had been no preparatory hypodermic medication, nor was any in readiness for instant use.

Dilatation of the sphincter ani muscle is apparently unknown for such cases, as is also the use of the normal salt solution. Notwithstanding collapse is the rule, rather than the exception, at this hospital, there is never any previous preparation for an emergency.

Having such hazardous results, they naturally avoid giving a general anesthetic and resort to local anesthesia for even formidable operations.

Working continuously along this line they have evolved a radical method which produces surprising results and in a measure compensates for outrages done to the science of general anesthesia.

In this hospital one sees operations for appendicitis, artificial anus, radical cure of hernia, varicocele, etc., done under local anesthesia produced by injecting cocaine directly upon or into the nerve trunk supplying the part. The patient is perfectly conscious, and feels very little, if any, pain, though there is frequently some nausea during and after the operation.

Generally speaking, it is doubtful if this method is superior to general anesthesia, when scientifically induced, but every physician will readily recall cases in which it might have been used advantageously. I am reliably informed that it has not as yet been tried in England, though it is, of

course, probable that only a few have heard of it.

Possibly some of my readers had the pleasure of meeting the celebrated French surgeon, Dr. Pozzi, when he was in America eight years ago. His operating room in the Broca Hospital is a model of aseptic possibilities, and

it is a pleasure to see him work. He frequently uses instruments of American design and manufacture, and insists that his chloroform must be administered in accordance with the American idea. Thus we see that Europe is learning from America as well as America from Europe.

Daucus Pusillus (Rattlesnake Weed).

W. C. SHIPLEY M. D., HODSON. CAL.

DAME Nature, the gentle goddess, has provided us, no doubt, with a specific remedy for every morbid condition to which flesh is heir, only we medical men have not had the good fortune to discover all of them.

Much has been said and written upon the treatment of rattlesnake bites and the stings of other venomous insects and reptiles, and many drugs have been used with varying degrees of success, but in calling the attention of the profession to this peculiar remedy it may be that a panacea for this particular species of systemic poisoning has been found.

Rattlesnake weed was called to my attention by some Mexicans whom I had treated, and by them it is considered an infallible remedy.

Rattlesnake weed is a species of native carrot (*Daucus pusillus*). Nat. Ord. Umbelliferae, and is known to the mountaineers as Rattlesnake weed, and to the Spaniards as Yerba de Vibora.

It grows, strange to say, on rocky mountain sides where the venomous

rattler is wont to lurk, and is about the only green weed to be found in August, when the leaves of every other herb are dry. Drying does not seem to impair its virtue, for when moistened with a little water it soon regains its fresh green color.

The Mexicans and Indians make a poultice by mashing up a bunch of the tops sufficiently moistened, and apply it to the wound. As yet I have not had an opportunity of proving its curative powers in poisoning from the bite of a rattlesnake, but have used it in two cases of tarantula stings with wonderful results.

Both cases were seen within a few minutes after the sting had been inflicted. The pain in each was intense, and the swelling with a line of purplish discoloration was beginning to make itself manifest. An application was made as described and in about fifteen minutes the pain had subsided, and at the end of three hours the application was removed and all symptoms had vanished, and hardly a trace of the

fangs of the ugly insects could be found.

Upon a dog that had been inoculated with the fangs of a large rattler that had been killed about two hours, an application of the weed seemed to work all right as no untoward symptoms developed. Perhaps the dog would not have died anyway.

There is no doubt in my mind but

that this herb possesses valuable therapeutic properties and some of our manufacturing drug houses would do well to experiment with it.

As to the physiological action of this drug when taken into the system by way of the stomach we have no data, but should think that it would possess marked anti-zymotic properties.

The Various Schools of Medicine.

THE onslaughts on rational and scientific medicine are proceeding from many sides. Ignorance on the part of the public in regard to medical matters makes it an easy matter for quackery to carry off victories and to obtain adherents. Carlyle said: "There are forty million Englishmen in the United Kingdom, and most of them fools." While it would not be fair to say that of the eighty million inhabitants of the United States are fools, it is certain that quite a goodly number belong to that category. How otherwise account for the large number of fads and follies, that mushroom-like spring up in various corners of our vast country, each one of them boasting of a large number of followers and dupes? That the sophistries propagated by the false leaders will not bear rational criticism goes without saying; but by the public they are accepted as gospel truths. One of the favorite arguments—an argument which appears to possess much weight with the uninformed and unsophisticated—is the contention

that medicine is no science at all; that it is nothing more than a jumbled collection of a few empirical facts and observations; that it consists of several "schools," each diametrically opposed to all the rest; and a practitioner of one school treats his patients on lines entirely different from those accepted by the practitioners of the other schools. This being a fact, say these false leaders, there is only one conclusion to be reached: Either all schools of medicine are wrong, or, at least, only *one* is right and all the rest are wrong. As each school believes that it is the only right one and that the others are in ignorance and error, there is no possible means for the layman to determine which is really the right one. The only just way out of the dilemma, therefore, is to abolish the control of the practice of medicine altogether and permit everybody to practice who wishes to do so, leaving it entirely to the people to choose their medical advisers.

With a show of plausibility, these

sophists say: "Why are there no different schools of physics, schools of chemistry, schools of botany? Because these are *sciences*. Medicine, on the other hand, is no science at all, but a conglomeration of mistakes and superstitions." Says one of the periodicals devoted to quackery of the worst form: "—They are the advocates of the various schools of medicine. They do not agree among themselves on a single question of importance to the patient. They exhaust the vocabulary of vituperative words in describing each other's practice. The homeopath calls the allopath a murderer, while the allopath calls the homeopath a flim-flammer. The eclectic is as sure that the allopath is wrong, as he is sure that he himself is right.—The dear people are warned by the allopaths against the homeopath. The unsuspecting public is warned by the homeopath against the allopath. The unsophisticated masses are warned by the eclectics against other schools of medicine," etc., etc., *ad nauseam*.

But let us look a little more closely into the matter. Are there really such wide and fundamental differences among the schools? Let us take, for example, a case of placenta previa or one of transverse presentation. Is such a case treated differently by the allopath, the homeopath, and the eclectic? Not at all. All competent practitioners of either of these schools will treat it exactly alike. Take a case of Potts' or Colles' fracture, or one of dislocation of the shoulder. Will it be treated differently by followers of the different schools? No, but exactly

alike. Will a stone in the bladder, an intussusception of the bowels, an incarcerated hernia, an acute or chronic otitis media, a severe nasal hemorrhage, a foreign body in the larynx, a trachoma, an iritis, a glaucoma, a severe shock, a case of poisoning, etc., etc., be treated differently by the representatives of the various school? Most emphatically, No! All such cases are treated practically alike by the educated and competent physicians of all schools. If there are any differences, they are not more divergent in character than the variations in treatment practiced by the followers of one and the same school. The real difference among the schools becomes only manifest in the internal treatment of *some* internal diseases. But even here there is a universal agreement as to the general management of the case, as to hygiene, nursing, diet, etc. The difference is only in the drugs used and in the doses, and even in this respect the barriers are beginning to be thrown down, and what at one time seemed to be an impassable gulf is beginning to be bridged over. The homeopaths now largely recognize that the action against excessive and careless dosage during the last quarter of the eighteenth century and the first quarter of the nineteenth century, has swung to the other extreme, and the majority of them have at present no scruples in using drugs in the same doses as they are used by the regular physicians. The eclectics, to whom at one time mercury was the incarnation of everything wicked and diabolic, are now using the salts of that metal with-

but any compunction. They have perceived that it was the careless and excessive administration of that drug that occasionally worked havoc with the patient's constitution, and that if administered with proper precautions—a thing necessary in the administration of any drug—it is one of our most powerful therapeutic weapons. Even the newest remedies, the latest products of the synthetic laboratory, are used with almost equal frequency by the followers of all the three schools. Druggists with a large prescription trade, who are patronized by regular physicians, homeopaths, and eclectics, testify to the fact that while in minor ailments and in mild diseases the treatment by physicians of adverse schools may vary widely, yet in severe diseases and in emergency cases the prescriptions are practically the same—the drugs and the dosage—no matter from what school they emanate.

Again, graduates of the homeopathic

and eclectic schools attend the regular post-graduate schools and the foreign universities side by side with the regular physicians, and we speak from positive knowledge when we say that there are few among the best educated homeopathic and eclectic physicians who do not subscribe for one or more regular medical journals. The regular profession, on the other hand, fully and cheerfully recognizes that both the homeopaths and eclectics have done their share in behalf of medical science, and have contributed towards greater care and exactness in drug therapy. In the medical press—and of late more and more often—voices are heard against sectarianism, and the sentiment is slowly but surely crystallizing that there is but one science and art of medicine, and that minor differences in the treatment do not offer sufficient justification for the existence of separate schools.—*Editorial, Merck's Archives, March, 1901.*

Moot Questions in Abdominal Surgery.

H. A. ROYSTER, A. B., M. D., RALEIGH, NORTH CAROLINA.

NO matter how rapid the progress of surgery or how brilliant its achievements, there will always remain problems to be solved. So many uncertain agencies are involved in the surgical art that its results can never be foretold with exactness or estimated with accuracy. The local and general resisting power of the patient, the skill of the surgeon and the technique of

the operation are the circumstances chiefly concerned. In former times operative technique had to do rather with the manual dexterity of the surgeon himself. Now it may be defined as the sum of events connected with the attempt to secure and to preserve perfect asepsis, beginning with the preparation of the patient a few days before the operation and ending with

the closure of the wound or the final dressing. It includes the sterilization of all instruments, dressings, skin and hands previous to the operation, and constant watchfulness to keep them sterile during its progress. Personal dexterity counts for less than it did in times gone by. As the technique is, so are the results; and a surgeon of even moderate ability may succeed eminently, if only his technique is careful. How much greater the success if to this is added a resourceful skill, the gift of a surgeon born and not made! Yet, if he should neglect a well-defined and well-executed technique, founded on his own experience and that of others, the modern surgeon, however great his ability, would fail to obtain the results that should be his.

The personal equation shows itself at this day in the choice of technique, as it did formerly in operative skill. No two operators use precisely the same methods. There are, for illustration, as many different plans for disinfecting the hands of the surgeon as there are surgeons, and the various uses to which the several suture materials are put testify that there are "many men of many minds" in the surgical world. And yet, these men are working to the same end, trying to solve the same problems, endeavoring to remove the uncertainties and to perfect the possibilities of operative technique.

If these assertions are true of surgery in general, so much more do they apply to the special region of the abdomen. Abdominal surgery possesses all the uncertain features connected

with surgery elsewhere, and others which are due to peculiarities of location and structure. It involves the opening of the largest serous cavity in the body and continued manipulations within its walls. Several important considerations present themselves. There is need of overcareful (1) *asepsis*, for a slight slip may mean disastrous consequences—not merely delayed convalescence, but loss of life. A proper (2) *toilet of the peritoneal sac* is an essential requirement. The (3) *wound is to be closed* in a way which will afford a strong support and protection to the contents of the abdomen and be of the least subsequent annoyance to the patient. The (4) *after treatment* must be directed toward guarding against any possible error in technique; granting the patient a comfortable convalescence and prompt restoration to health.

The object of this paper is to consider in detail the four requirements outlined above. They represent, it is thought, the leading problems in which abdominal surgeons are interested and about which there are the greatest differences of opinion. The writer hopes to introduce the subject in such a manner as to invite discussion at the hands of those who are concerned with the development of abdominal surgery. The views and practices of others working in the same field must always be of value to those who are seeking to learn the best methods. For the purpose of obtaining an approximate consensus of opinion, the following questions were asked of five prominent operators in each of our

three largest cities—New York, Chicago and Philadelphia: 1. Do you employ rubber gloves in operating, and would you recommend their routine use? 2. Do you irrigate the peritoneal cavity in every case of abdominal section? 3. What is your method of closing the abdominal incision? 4. Give outline of your after-treatment following celiotomy, especially with reference to securing movement of the bowels. The personal replies to these questions are added to some remarks by the writer on each topic.

1. *The Use of Rubber Gloves.*—It is not deemed necessary to go over the numerous methods in vogue for sterilizing the hands. Of several different methods, one is as good as another, provided the surgeon's "aseptic conscience" be ever above reproach. As a matter of fact, too well known to need more than a reference, the hands of the operator and the skin of the patient cannot be rendered sterile by any present plan of disinfection. The staphylococcus epidermidis albus, innocent enough when quiescent, but mischievous if aroused, eludes and resists all measures intended for its destruction. The wearing of gloves, then, is taken as the extreme effort to prevent infection from the hands, inasmuch as the gloves can be perfectly sterilized and thus all danger from that source removed. Rubber gloves alone are considered here, other materials having been largely discarded. It has been about five or six years since rubber gloves were first employed in clean surgical cases. They were introduced as a solution of the prob-

lem of hand disinfection, and this is the one need for them in aseptic wounds. Many surgeons found, however, that when gloves were employed their results seemed no better than before, the few infections in large numbers of cases being traceable to other sources than the hands. The question then came, Are gloves necessary to secure the best results? Does the advantage of the ideally sterile hands compensate for the disadvantages—and they are many—of encasing them in rubber material? Let us see what these advantages are. It is obvious that the wearing of gloves dulls the sense of touch. In the case of very thin ones, usually worn by operators who employ gloves, this is less and less marked the more they are worn; and by constant use the fingers may become sensitive to outside impressions, but never with the delicacy of the bare skin. The gloves worn by assistants are frequently thick and heavy. Even when gloves are used it is necessary to have the hands aseptic, for it may happen that the gloves are punctured with a needle or torn while in the act of tying a ligature, and it is so often that the gloves must be removed in order to bring the tactile sense more acutely to bear. An eminent gynecologist wears gloves during a celiotomy and then takes them off before closing the wound for the purpose of examining the whole contents of the abdominal cavity in a satisfactory manner. It would seem that he defeats his own object and puts at naught the supposed value of his hand-covering.

The thought must suggest itself, further, that ideal technique cannot be attained by the exclusion of danger from the hands when it is remembered that the patient's skin, from which arises far more infection than from the hands of the surgeon, constantly presents the same condition of affairs. But while there are objections to the use of gloves, it is recognized that there exists indications for them under certain circumstances. They may be employed in operating on pus cases and infected wounds, or in making examinations of the rectum or vagina, as a protection to the surgeon himself and to subsequent patients. In the presence of positive danger of transmitting infection, the advantages outweigh the disadvantages. It can be safely asserted that the majority of American surgeons do not employ gloves at all. Some use them under the conditions just named; while only a few wear them as a routine. From thirteen replies received only three of those addressed are found to use gloves habitually. J. B. Deaver unqualifiedly answers in the affirmative; Clark, of Philadelphia, withdraws them when breaking up adhesions deep down in the pelvis, and then again puts them on. McBurney says: "I should be as likely not to sterilize my instruments as to omit the protection for the patient against sepsis which the use of these gloves insures." Most of the others wear them in foul cases and usually require their assistants to do so in all operations; Boldt, Byford, E. C. Dudley, Keen, F. H. Martin, E. E. Montgomery and Senn. Three operators

do not wear gloves or advise their routine use. Robt. T. Morris: "I cannot imagine a young operator becoming very expert if he uses gloves. I believe that more bacteria drop into the long-exposed wound of the glove operator than are carried in by well-prepared bare hands." John B. Murphy: "I believe that if a man cannot keep his hands clean, he cannot keep gloves clean." Joseph Price: "I have never had a pair on. I do not recommend them." In Europe, where experiments were first made with different materials for covering the hands in operating, gloves are employed less than formerly. The Berlin surgeons rarely use them, and Tuffier is said to be the only glove operator in Paris.

2. *Irrigation of the Peritoneal Cavity.*—To irrigate or not to irrigate has almost superseded the question of drainage as a subject of discussion and doubt. The extremes of opinion represented by a nearly equal division of operators—those who irrigate the peritoneal cavity in every case of abdominal section and those who do not irrigate at all. Between these there is perhaps a larger number who employ irrigation only to wash out foreign material from the abdomen. What would be an indication for irrigation to one surgeon is not considered so by another. In general, we may say that the most imperative need for it is to cleanse the cavity of pus, blood or tissue debris. This would seem to be a rational proceeding, getting rid of offending substances which are either infectious or likely to be; yet there are many surgeons who take an opposite

view. They believe that the irrigating fluid distributes the infecting material over the whole peritoneal surface, thereby causing more danger than if it were localized and, in the case of pus, drained out, or, in that of other foreign substances, wiped away by dry sponging. There is reason on the side of both methods. Were it possible to remove every particle of foreign matter from a certain area by means of dry gauze, this would surely be the plan to be followed in every instance. On the other hand, irrigation may serve a more useful purpose by displacing the greater part of the *debris* and diluting the remainder to such an extent that its virulence is distinctly lessened and, possibly, entirely overcome. The truth is, there is no means of judging correctly the merits of these opposed methods. Results cannot decide the question, for operators habitually using one or the other of the plans are able to exhibit a long series of equally gratifying successes with excellent arguments for the faith that is in them. Irrigation has in its favor that it may bring about further desirable effects besides cleansing the peritoneal cavity. The fluid used is generally the normal salt solution and, if a portion of this is left in the abdomen, as is frequently done, it may be relied upon to lessen thirst after the operation, cause increased action of the kidneys, combat shock and prevent post-operative adhesions. These conditions alone might furnish sufficient grounds for irrigating in every case. However, the fancy of the operator holds mighty sway here, as it does in other branches of surgical

technique. In answer to the question: Do you irrigate the peritoneal cavity in every case of abdominal section? the following replies are noted: Clark irrigates in every case and leaves one-half to one liter of salt solution in at least ninety per cent of abdominal sections. Keen does so "not in every case but in the majority." McBurney, Price, Morris, Senn, Dudley and Montgomery generally prefer a dry technique, irrigating only when special indications exist. Martin and Boldt seldom irrigate. Byford hardly ever, and Deaver answers the question in the negative. Murphy says: "I never irrigate the peritoneal cavity. By that I mean I have not used water in the peritoneal cavity for any purpose whatever except eight times since 1889. These were cases of peritoneal infection from rupture of the stomach or bowel, and the water was used for washing out the bowel—or stomach—contents that had escaped into the peritoneal cavity. In place of irrigation I cleanse the peritoneal cavity with dry sponges, and then use numerous strands of iodoform gauze drainage and also use glass tube drainage. No matter how much pus there is present, it is sponged out with dry sponges."

3. *The Closure of the Abdominal Wound.*—Accurate apposition of the cut edges of the abdominal incision is essential to the proper healing of the wound. Since the abdominal wall is composed of several layers differing in structure, it is desirable that these be perfectly coapted, that the tissues may be left as nearly as possible in their normal relations. The prevention of

hernia is seen to depend much more upon primary union of these layers than upon the length of time in which the patient is confined to bed or upon subsequent method of support. To secure this perfect union, various methods have been devised by modern surgeons, some simple others elaborate, according to theories held or results obtained. It is agreed by all that the most important factor in the prevention of hernia is the sheath of the recti-muscles. Firm union of this structure will compensate for other weak points in the abdominal wall. Separate suture of the peritoneum, which is practiced by many, may be requisite for shutting off infection from the skin; but it is not instrumental in preventing hernia, for every protrusion of the intestine is covered by the peritoneum as its sac. Separate suture of the muscles seems useless. They do not appear to unite more solidly by this method than when their fascial protection is closed. The skin, of course, must be carefully apposed, in order to seal the wound and secure union by first intention. A number of operators still adhere to the en masse suture passing through all the structures, as used by primitive abdominal surgeons, and claim satisfactory results. Probably a greater number supplement these sutures with catgut on the fascia, while others unite each layer separately—peritoneum, fascia, fat and skin. Doubtless there are very few who use exactly the same method; and yet each believes his own plan is soundest in theory and most successful in practice. It may be interesting to note some of the replies

to the personal communications. Price uses the "through and through suture, silkworm gut, long straight needle." Martin, generally, and Keen, occasionally, close the incision with through and through silkworm gut sutures, but sometimes employ catgut in layers. The remainder of the list employ some method of tier suture, each one with different modifications. Clark and Byford use buried silkworm gut on the aponeurosis; Murphy, the figure-of-eight silkworm gut suture, which is allowed to remain from ten to fifteen days.

4. *The After-Treatment.*—Although it is true that in the majority of cases the fate of the patient is decided when the abdomen is closed, yet the duty and responsibility of the surgeon do not end after the operation is completed. Indeed, the management of the patient a few days succeeding the operation requires intelligent judgment and discriminating care, for by these convalescence is shortened and even death averted. Many a life has been lost by carelessness or neglect. It behooves the surgeon, therefore, to give a watchful eye to the after-treatment, seeking to improve and perfect his methods in this regard as he does in respect to the operative technique. That surgeon is most successful here who uses his knowledge of general medicine to the best advantage. The late Professor Ashburst well expressed the idea when he said: "The importance, and even necessity, of a thorough knowledge of practical anatomy, can, indeed, be scarcely overrated; yet it is more essential for the surgeon

to be well versed in pathology and therapeutics (or in other words, to be an accomplished physician), than it is for him to know the attachments of every muscle in the body, or all the possible variations of arterial distribution."

It must not be forgotten, however, that experience teaches the abdominal surgeon many things which the medical practitioner never learns, so that the after-treatment of a celiotomy should be looked at through the eyes of the physician, but from a surgeon's point of view. Above all, the tendency to do too much is to be controlled.

The methods followed become largely matters of routine and need not be varied except to meet unusual conditions. Without reciting any particular plans in detail mention will be made of a few features that are still open to question. Absolute quiet and rest, the withholding of everything from the stomach twenty-four hours, liquid diet for five days—these seem to commend themselves to most operators. By some the administration of hot water is begun immediately after the operation. The kind of liquid diet allowed the patient is a matter of some importance. Many surgeons will persist in giving sweet milk as the first food after an abdominal operation and in claiming that it is the most digestible of all aliments, in spite of the fact that it disagrees with nine out of every ten patients. The very necessity of having to continually dilute it with lime water or prepare it in other ways is proof that its digestion is usually difficult and uncertain. In these cases, milk

decomposes in the bowels, causing gas and producing constipation. Strictly speaking it cannot be regarded as a liquid food. More rational would it seem to employ, for the first day or two at least, concentrated liquid nourishment in the forms which leave little or no residue, and which are digested wholly or in part by the stomach juices—such articles as beef extracts, animal broths and albumenized drinks.

There is much dispute over the use of morphine after abdominal operations. The older operators invariably administered opiates, believing it best to relieve the pain at all hazards, and the general surgeon, more than the gynecologist at the present day, is prone to give them. Histories of the cases in which morphine had been given by former surgeons showed plainly its bad effects, and there was a time when it was practically not given at all. It is now administered by some operators in almost every case; others give it occasionally in one-sixth, one-eighth, or one-tenth grain doses; many yet do not find use for it. The records will undoubtedly prove that, all other things being equal, those cases in which it is not used get along better. The administration of small doses would appear worse than useless, for they only tease and do not relieve the suffering; while, in quantity sufficient to quiet the pain, morphine does harm, chiefly by constipating the bowels and favoring the occurrence of tympanites.

This subject of bowel movements after celiotomy deserves, and has lately received, special attention. In normal

cases, unless direct indications should arise, the practice has been conservative. But recent writers, particularly Byford, of Chicago, and Ramsay, of Baltimore, have urged the expediency of securing evacuation of the intestines at the earliest possible moment after the operation. There are evident reasons for this activity. In a word, it succeeds in heading off the complications so apt to occur, and there are presumably no arguments against it. Whether the bowels are moved early or late, it is well to have a definite plan with regard to inducing their action. The agents to be relied on are calomel, the salines and some form of enema. These can be employed in the doses, at the times and under the conditions suitable for each case.

The replies to inquiries on this question reveal some difference of opinion. Byford pays "less attention to bowel movements than to the voluntary expulsion of gas," and gives his method as follows: "1. High glycerin enema before patient is removed from table. 2. One drachm of magnesium sulphate every hour until flatus is expelled freely per rectum. 3. If flatus is not passed twelve hours after operation I give a glycerin enema every two hours (preferably high) until the flatus passes free per rectum between enemas."

Clark adheres to the principle of this method, but gives calomel in divided doses on the night of the operation, "followed the next morning by a simple soap-suds enema." Martin apparently believes in the same theory, using calomel and salines alternately, and "glycerin enemas every twelve

hours to keep the flatus going." Murphy covers the same ground, combining the methods of the last two with modifications. Senn moves the "bowels at the end of twenty-four hours." Robt. T. Morris: "Bowel movements obtained on second day by high rectal injection of hygroscopics for osmotic effect." Boldt and McBurney have the bowels moved on the second or third day, the latter usually avoiding calomel, believing that this "generally causes at least a few hours of discomfort when given soon after operation." Joseph Price: "No hurry about moving the bowels, if the patient has been well-purged and prepared. If gas is annoying, soapy water or turpentine enema, rarely required." The remaining answers do not indicate any departure from common methods.—*The Charlotte Medical Journal*.

Saline Injections in Summer Diarrhea.

Saline injections, subcutaneous or rectum, are extremely useful in severe cases of summer diarrhea, especially where there is much prostration. This is a fact known to every practitioner, and but rarely used, for some reason or another. If used per rectum, flush the bowels thoroughly with the saline solution, using from two two to four quarts, according to the child. Enough will remain and be absorbed to be of considerable benefit.

This procedure I have found of great value in cases of extreme marasmus. The frequency and amounts employed depend upon the judgment of the physician. Flushing is not necessary usually, simply the direct injection per rectum of a small quantity of the solution.—*Can. P. & R.*

SURGERY

Edited by GEO. G. GERE, M. D., Parrott Building, San Francisco, Cal.; Prof. of Principles and Practice of Surgery, California Medical College.

Circumcision.

GEORGE I. BLUHM, M. D., SAN FRANCISCO.

Circumcision probably originated with the Jews. The Mahomedans and other Asiatic nations who practice circumcision have borrowed it from them. It is performed on the eighth day of the birth of the child as a religious ceremony. We find that commanded in the Bible. It was undoubtedly intended by the great law-giver, Moses, as a hygienic remedy. The suggestion for the necessity of it must have occurred at the time when the Jews under his leadership ran from Egypt. Imagine an unequipped army with women and children crossing the Red Sea, at the time of the ebb, to the Arabian desert, and for forty weeks living on starvation rations! Every one who is acquainted with the military system of Europe knows how widespread venereal diseases are in the army and the difficulty to bother with it, although there is a weekly so-called penis-inspection by the army surgeon and a severe discipline in regard to cleanliness of the organ. Very likely the army of Moses was similarly affected, and under the conditions that would tax the military genius of a Cæsar or Napoleon, he commanded circumcision as a preventive. That it

was not intended as a means of distinction of the race, I judge (1) from the fact that it is in a concealed part, and (2) by analogy.

The Mosaic method of killing cattle, and that the killer must be a veterinary surgeon; the compulsory examination of abdominal viscera, and especially the lungs, to make sure that there are no adhesions or tubercles before he can pronounce the meat eatable (if there is any suspicion the meat is condemned); the prohibition by the Mosaic law of the use of fishes which live in stagnant waters, for fear that the water might be contaminated and through it the fishes; the forbidding of the use of pork (he did not know that boiling kills trichina); his laws in regulating sexual intercourse only after a certain period of menstruation and childbirth; the laws of isolating contagious diseases at a certain distance outside of city limits; the compulsory washing of hands before meals; the command to rest on the seventh day, are only a few examples of the Mosaic laws pertaining to hygiene, which tend to show that circumcision was also commanded on the same line.

Let us for a moment consider whether we should share his view in regard to circumcision, or should look upon it as a relic of barbarism and

discourage it. Before I proceed further I want to call the attention of the reader that I exclude pathological conditions which call for circumcision, as in cases of too long prepuce, etc. We all agree to the propriety of it; nor do I care to attack it from a religious standpoint. Children were even burned at the stake by their own parents to please the gods. We will look into the good and bad side, the advantage and disadvantage of the question under consideration, and we will be able to answer it more intelligently and scientifically. We will analyze it from a hygienic, preventive, physiologic, pathologic and humanitarian standpoint. Let us adopt the Spencerian method—sense and observation.

From a hygienic standpoint the prepuce is very easily taken care of and does not require any special attention. Uncleanliness is punishable by suffering no more than in any other parts of the human body. From a preventive standpoint circumcision does not shelter from any venereal disease of any kind when exposed. Practically we meet just as many cases of venereal diseases of all kinds in the Jew, for instance, as in the Gentile. I have on record a few cases of newly contracted venereal diseases in Jews over 70 years old that I have treated in Chicago. Strange as it seemed to me, it is a fact nevertheless.

Physiologically, the prepuce is intended for the protection of the glans penis; and the follicular sebaceous secretion, smegma, is for lubrication of the parts. It bears the same rela-

tion to glans penis as the lips to the mouth, the eyelids to the eyes, the labiæ to the vagina, etc. We can just as well remove the lip or lips, one or both eyelids or labia, and still not render the corresponding parts functionally useless. If anyone will tell me that they are there for a certain function or purpose, I will say the same is true of the prepuce.

Now we come to the most important part of the question—pathologic. Any one of us who has had more or less experience in venereal diseases among all nationalities, circumcised or non-circumcised, knows how difficult it is sometimes to treat a case where the prepuce is swollen. For days, and exceptionally even for weeks, we cannot get to the seat of the trouble, whereas if the patient was circumcised he could be more satisfactorily treated. Admitting this advantage, are we any more justified in recommending circumcision than the universal removal of the appendix to prevent appendicitis, or extraction of the teeth, as soon as they come out, to prevent toothache or formation of ulcerated cavities, or the excision of labiæ which are the usual seat of chancre, and would render the vagina more accessible to cleanliness too? Lastly; from a humane standpoint, imagine the cruelty of subjecting a young baby to such torture. Furthermore, how many deaths occur from it. I myself have signed a good many death certificates during my practice in Chicago that I could trace directly to blood poisoning from the act of circumcision, which as a rule is performed by persons entirely

ignorant of antiseptis. To recapitulate: 1. Circumcision from a hygienic standpoint, not necessary. 2. From a preventive standpoint, useless. 3. From a physiologic standpoint, removal of a functionally useful part, mutilation of organ. 4. From a

pathologic standpoint, not justified. 5. From a humanitarian standpoint it is cruelty, and punishing a community in advance for a certain benefit that might accrue to an individual. It ought to be prohibited by law.—*Pacific Medical Journal*

Electro-Therapeutics

Edited by F. T. LAMB, M. D., Murphy Building, San Francisco, Cal.; Lecturer on Electro-Therapeutics, California Medical College.

The Electrostatic Current in the Cure of Consumption.

MARVIN A. CUSTIS, M. D., WASHINGTON.

The use of electrostatic current in the cure of consumption is of recent date, yet its use in this generally ungovernable disease has proven beneficial, to say the least; and when this current is used in conjunction with germ-destroying solutions in the so-called "transfusion method," its action is nothing short of curative.

The beneficial action of positive insulation, not only in consumption but in other conditions, is above dispute. For some little time past I used the positive insulation alone in this disease; then I began to use the positive insulation and positive breeze to the chest at alternate treatments.

Several years ago, when the inhalation of germ-destroying vapors were first brought to my attention, I tried them and found good results to follow the inhalations, especially by the "bib-

method," of a five per cent solution of formaldehyde.

Although finding good results following the use of the electrostatic current and the inhalation of the formaldehyde, it never occurred to me to combine the two until my attention was called to a paper presented to the French Academy of Science, advocating the use of "electrically diffused formaldehyde," in this disease.

For the past ten months I have been using this current in conjunction with formaldehyde in the so-called "transfusion-method" with what may be called excellent results.

By means of static cataphoresis—for that is what the "transfusion method" really is—the vapor of the formaldehyde is transfused in the tissue of the chest and lung, causing destruction of the bacilli with which it comes in contact. And, so far, there has been no bad results from the static cataphoric treatments.

The results of these treatments in

consumption are far more favorable than the results obtained by any other method of treatment.

Of eight hundred cases treated by this method and reported to the International Medical Congress, convened in Paris this last summer, six hundred were completely cured. In conducting these experiments the physicians divided the cases of consumption into three classes, viz:

1. Those who were in the first stage of consumption, or favorable cases.

2. Those who had reached the second stage of consumption.

3. Those far advanced in the disease, and who, under ordinary circumstances, would be considered incurable.

Now, give strict attention to results of treatment by this "transfusion-method." In the first class, or those in the first stage of consumption, the cures reached 100 per cent; while 75 per cent of those in the second class were cured; and in the third class, or the hopeless cases, 30 per cent were cured.

My favorite solution is one consisting of one ounce of a forty-five per cent solution of formaldehyde and seven ounces of distilled water, to which is added one dram of cinnamon water, to make the treatment more pleasant to the patient. Eucalyptus, as well as hydrastis, is sometimes added to the solution for its supposed curative properties.

In giving the treatment, the patient is seated upon the insulated platform, which is connected with the negative pole of the machine; cloths wrung out of the formaldehyde solution above

referred to are applied to his chest and the point electrode, or concentrator, connected with the positive pole of the machine, is directed to that part of the chest covered by the cloths.

Personally, I prefer to use, in place of the point electrode, a brush electrode, made of many rather coarse wires, which is attached to the concentrator by means of a sleeve and directed to the chest.

Of course, other solutions, rather than the one of formaldehyde mentioned, may be used; and one may use specially-made static cataphoric electrodes if they wish; but these special electrodes possess no advantages over the brush electrode, as used above, except when it is desired to localize the treatment, or when using substances that must first be volatilized by heat; in the latter case the special electrode must be used.

In these treatments the patient gets the benefit not only of the "transfused formaldehyde," but also of the inhalation of a certain amount of the vapor of the formaldehyde and of the ozone, which of necessity is generated.

The treatment should be from ten to fifteen minutes in length and repeated about every third day.

Instead of applying the cloths to the chest, I find by inserting cotton, previously saturated in the formaldehyde solution, into the ordinary ozone generator of the McIntosh make, and applying this near to, or in actual contact with, the chest, proves equally as beneficial as the cloths against the chest, without the disagreeable features of wet applications to the cutaneous

surface. If further trial substantiates the above statistics, then the cure of consumption in a great measure is solved. Anyway, the results so far reported justifies sanguine expecta-

tions; and from personal experience I can heartily endorse the electro-static current and static cataphoresis in the treatment of consumption.

Read before the Medical Society of Washington.

GYNÆCOLOGY

Edited by J. W. HAMILTON, M. D., Parrott Building, San Francisco, Cal.; Prof. of Gynaecology, California Medical College.

Leucorrhea—Its Causes and Treatment.

There is, perhaps, no single condition so distressing to the patient or so exasperating to her medical attendant as leucorrhœa. Except in a few instances, such as specific and septic infections, leucorrhœa is almost always secondary.

Speaking broadly, the discharge can have its origin in one or three places: (1) the vagina, (2) the cervix, and (3) the endometrium of the body of the uterus.

The discharges vary greatly in character, depending upon their point of origin.

Vaginal leucorrhœa is, always excepting gonorrhœal discharge, thin and serous, rarely thick, and still more rarely streaked with blood.

Cervical leucorrhœa is extremely thick, very abundant, and rarely streaked with blood.

Corporeal leucorrhœa is thinner, often offensive and excoriating in character, and quite commonly streaked

with blood. I have seen patients whose thighs have been excoriated on the inside surface for a distance of four to six inches on either side, as a result of such discharge.

Leucorrhœa is very common in women whose general health and vitality have been lowered for any reason. It would seem that almost any local or general condition slightly out of the normal sets up a leucorrhœa. I would be useless to attempt to give a list of the causes, but as an instance of an unusual etiology I may mention that I have seen a stubborn leucorrhœa in a girl of twenty-four, which was traced by her medical attendant and myself to ungratified sexual excitement.

When a patient presents herself complaining of leucorrhœa, the first thing to do is to determine the cause, if possible. Any local treatment would be worse than useless, unless the source of the trouble be removed at the same time.

Vaginal leucorrhœa it has been my custom to treat by use of tonics, for

the general health, astringent douches of alum and zinc sulphate, and the occasional use of a solution of silver nitrate, gr. x-xx to fl. $\frac{3}{4}$ i. I apply this latter by inserting a cylindrical speculum, filling it full of the solution, and then slowly withdrawing the instrument, thus making sure that the solution reaches every part of the vaginal wall. This is more satisfactory than the use of a swab. This treatment combined with douches of corrosive sublimate 1:4000, is the one I use in gonorrhœa, and it has given me perfect results.

Cervical leucorrhea, always excluding a gonorrheal infection, is usually due to a catarrhal inflammation of the cervical endometrium, usually secondary to some other condition. The discharge here is very thick and copious, necessitating the wearing of a napkin. It is often accompanied by erosion of the cervix. This erosion, when not due to laceration, is produced by swelling and prolapse of the cervical endometrium, and then desquamation of the squamous epithelium underneath the prolapsed mucous membrane. It has been my experience that when such an endometritis exists it usually involves the corporeal endometrium as well, so that we can often cure the condition entirely, or at least form a much better foundation for satisfactory after-treatment, by a thorough curettement. My non-operative treatment consists in hot astringent douches, painting the vaginal vault with Churchill's tincture of iodine, and the use of boroglyceride tampons three times a week, the whole combined

with a general tonic treatment. I always prescribe tonics for these patients on general principles. They are generally indicated, and can, at the worst, do no harm. The only precaution taken is not to prescribe iron in cases where there is a tendency to uterine hemorrhage.

When this treatment has not the desired effect I begin using protargol bougies by the method I shall presently describe.

Leucorrhea from the uterine body is nearly always associated with an endometritis. It is a peculiarity of the uterine mucosa that when it becomes inflamed it hypertrophies so that from a normal thickness of one millimeter we may get endometrium of four or five times that thickness. Acute endometritis in this locality is nearly always septic from a labor or miscarriage. The treatment should be curettement to remove the hypertrophied masses, then tonic treatment with the intra uterine medication of one of the new silver salts in the form of bougies. —*John Cooke Hirst, M. D., in Indian Lancet.*

American Medicine states that each physician in the United States has 655 persons to look to for his support, according to the latest governmental statistics. California stands at the bottom, or top, depending on the view, of the list, for there are only 416 actual and prospective patients for each physician, while in Alaska 2,349 persons have to depend on one doctor. New York is near the average with 603 persons for each physician. Pennsylvania has 662 and New Jersey has 856.

Eye, Ear, Nose and Throat

Edited by H. BOSWORTH CROCKER, M. D., Auzerais Building, San Francisco, Cal.;
Assistant to the Chair of Ophthalmology, California Medical College.

Asthenopia.

By asthenopia we understand what the patient means when he says he has weak eyes; he cannot use them comfortably. In a good state of health he should not be conscious by discomfort of this function more than of any other.

For the most part the causes of asthenopia all have to do with—are, in fact more or less dependent on—impairment in, or tire from overuse of, the muscular apparatus of the eyes. This may be true even when the subject of the asthenopia is at fault first, and essentially, in his lack of nerve force. The neurasthenic becomes the “neurasthenope,” to use a word given us by Seabrook, because certain of his eye muscles are not efficiently and harmoniously innervated. His visual sense is impaired at the same time; so that, even if accommodation, convergence and fusion could all be efficiently performed, he still could not bring his vision up to the normal. But, where the neurasthenic condition is enough to impair the visual sense, it has already produced anarchy in either the ciliary or external ocular muscles, or both, even without the co-existence of error of refraction. Overuse in such cases is sufficient in itself to determine the discomfort. In less extreme

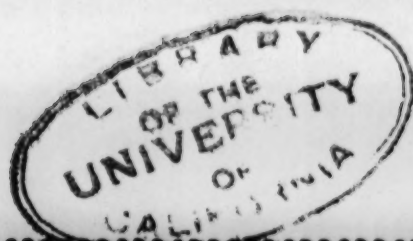
manifestations of the same type of individual, for whom, with Seabrook's permission, we shall retain the name *neurasthenope*, the existence of a *small error* of refraction will bring about the symptoms of eye-strain. In such, the correction of small errors of refraction is essential to their comfort. Otherwise they will say they have blurring of the print in reading, the letters dance before their eyes, they have brow aches, the light is not easily tolerated, and the eyelids are held closer together. It has been pointed out by Gradle and others that this class of asthenope is more often seen in the United States than in Europe. In most cases it denotes a degeneration of nerve tissue, an impairment of the quality of nerve force, or resistance. The worst feature about this type is that it is not always susceptible of much betterment. Attention to hygienic management is essential; but, even with great care, this class of patients easily finds its limit of endurance. Generations of care will be needed to regain that loss perhaps a single error has produced.

After the neurasthenope is excluded, there is still left a large class of *normal asthenopes*, so called by Gradle. By this term “normal” is meant all of those whose nerve tissue is not primarily at fault, whose nerve resistance is good, who do not easily have headaches or

other pains, who can tolerate and overcome without asthenopia small errors of refraction and other slight disturbances of the economy which would be certain to produce discomfort in the first class considered. When, however, these normal asthenopes have more than a certain small and tolerable amount of error of refraction, that error must be corrected or asthenopia is experienced. The error may be of various kinds. The predominating is hypermetropia, or hypermetropic astigmatism. Especially troublesome is irregular astigmatism of either hyperopic, myopic, or mixed character. By irregular I mean with angle away from the vertical or horizontal. A singular observation is that if error is made in correcting for such irregular astigmatisms, it is frequently tolerated by the normal asthenopes when the amount of error is not great; but it is beyond all tolerance by the neurasthenope. For example, at Moorfields it was often customary to order a correction at 90° when the ophthalmometer showed the error of 5° to 20° away from 90° . And this was usually tolerated. No doubt it might have been worn with much greater comfort at the proper angle. But evidently the patients at Moorfields were not neurasthenopes.

Causes capable of producing impairment of function of the ciliary muscle may also affect the external ocular muscles. Graëdy maintains that the latter are affected only because they are the servants of the former. Valk dissents from this and finds the external ocular muscles disturbed apart from the relation of convergence to

accommodation, due as he supposes, to the existence of a separate center for *fusion* from that which controls *fixation*. Differences in theory are accompanied by like differences in practice. Dwyer and Savage, supposing the muscles to be essentially weak, advised frequent and rhythmic exercises with accommodation and prisms. Gould elaborated the exercise of carrying the weighted convergence stimulus from the near-point to the far-point. To him the muscles were not weak, but simply needed central stimulation. Others regarded the anarchy as due to inequality of power in the muscles, and, therefore, sought to regulate their action by tenotomies and advancements. Those who thought the interni or superior recti were too strong did tenotomies on those muscles to meet the indications. Those who thought the externi were too weak advanced them. It is doubtless true that relief in many cases has been obtained by all the methods; it is doubtless equally true that failures have been scored by all of them. It is worthy of note that attention to co-existing troubles in other organs has given relief of asthenopia without resort to a method of treatment arising from any of the current theories. I have seen a muscular asthenopia disappear under tonic treatment, or a sojourn in the country. It frequently follows cure of uterine trouble. I have repeatedly caused its disappearance by removing faulty conditions in the nose. In conclusion, I have only this to say, that I hope to see the time arrive when muscular asthenopia, so called, shall be recognized to be but a symptom of disturbance of a part of the sympathetic nervous system.



NORMAL TINCTURES

Standardized. --- Alkaloidal strength always the same.

Uniform. --- Representing the drug minim for grain.

BRIGHT CLEAN
RELIABLE NO WASTE MATERIAL
NO DIRT---all Medicine

Do not prescribe them because they bear a certain label, but because they are the best that science, skill and long experience can produce.

NORMAL TINCTURES

are made ON HONOR

and when properly prescribed will always meet specific indications

A valuable book of 64 pages giving therapy and doses of 125 of these **Normal Tinctures** sent free, to physicians only, on request.

VEGETOL is an INNOVATION in *Antiseptic Mouth Preparations*, and is hailed with delight by the leading Dentists and Physicians as the "*Ideal Dentrifrice*."

Its *Vegetable Base* is much more cleansing than earthy powders, and can be used ad libitum without injury, which is not true of any other dentrifrice.

Its soluble portions (25 per cent.) are alkaline, antiseptic and alterative, not only giving the greatest protection to the alimentary tract, but the most satisfactory and prompt relief from fermentive and putrefactive indigestion. These are entirely new and most practical features for a dentrifrice.

Send for a sample and literature.

The Wm. S. Merrell Chemical Co.,

Laboratories: Cincinnati

New York City	San Francisco	New Orleans	London
96 Maiden Lane	45 Stevenson St.	426 Camp St.	47 Wilson St. Finsbury Sq
	CHICAGO, 231 Lake St.		

TYPHOID FEVER.

COMPETENT authorities agree that very **Little Medication** is required or is **DESIRABLE** in the treatment of this disease.

It is necessary to **Control** the **Temperature** of the patient, and the best means of reducing dangerously high temperature is by repeated sponging of the body with tepid water, the use of the wet pack, or when the surroundings will permit, the employment of the full bath.

The **Alimentary Canal** should be kept in as nearly an **ASEPTIC** condition as possible and this may be accomplished by the **Judicious** administration of Zinc Sulpho Carbolate. (The Merrell Company supply this remedy in the convenient form of 2, 3 and 5 grain tablets.)

FLUID EXTRACTS

Sugar and Gelatine Coated Pills

TABLETS

Triturates Compressed
Chocolate Coated Hypodermic

Elixirs, Normal Tinctures, Effervescent Salts, Alkaline Elixir, Vegetable.

Educts from WINTER-GREEN are among the leading specialties of the Merrell laboratories:

Acid Salicylic,	Sodium Salicylate
Ammonium Salicylate,	Iodozen
Calcium Salicylate,	Gaultherine
Ferro Salicylate,	Xanol

The **Greatest** danger which threatens the patient is that of **Intestinal Perforation** and the remedy that will do more toward lessening this danger than any other is

Solution Bismuth and Hydrastia—Merrell

It acts as a sedative and mild astringent to the entire intestinal tract.

Many years of Successful Employment

Justifies the confidence placed in it by the medical profession.

Send for literature and samples.

THE WM. S. MERRELL CHEMICAL CO.

Manufacturers of a Complete Line of Pharmaceutical Preparations of the Highest Class.

Laboratories: Cincinnati

New York City 96 Maiden Lane,	San Francisco 45 Stevenson St.,	New Orleans 426 Camp St.,	London 47 Wilson St., Finsbury Sq're
	CHICAGO , 231 Lake St.		

A Review and Digest *MEDICINE and SURGERY.*

Mixed Marriages and Sterility.

In the recent publication of the facts and conclusions arrived at by the Anthropological Expedition which has worked out in Torres Straits a valuable genealogical method of collecting social and vital statistics, we learn that during the last thirty years many marriages have taken place with members of other races, and the statistics show that these marriages were frequently childless. It certainly is a matter of great biological interest that fewer children should be born of such marriages than between members of the same race, but inasmuch as many of the marriages were only of a temporary nature, terminating on the return of the husband to his own home, it must be admitted that disturbing factors are present which have to be considered. The prevalence of abortion which is known to be practiced in the Torres Straits has also to be reckoned with before accepting the generalizations too confidently.—*Medical Press and Circular.*

Diseases of the Ovaries.

There is some reason to fear that what we shall have to say about this subject will not be very satisfactory or make very pleasing reading for patients or physicians. What we have to say, however, is the truth as we see it.

The ovaries constitute one of the

most convenient physiological scape-goats of which we have any knowledge. If a woman has something rather obscure the matter with her and the doctor does not know exactly what to call it, he lays it to the ovaries. If the doctor be an ambitious fellow, he thrashes around quite a while trying to fix the blame on some other organ, but if he doesn't see his way clear to convict any other part of the body of the symptoms of which his patient is complaining he pounces upon the ovaries. The poor ovaries have no means of defense. Exactly what symptoms they should produce in case they were diseased, no man knows. Whether an inflamed ovary should hurt or smart, or ache or throb, or produce a sinking feeling, or make a woman nervous, no man knows. It is this want of definite knowledge as to what symptoms a diseased ovary should produce that make the ovary such a splendid loophole through which the doctor can make his escape when he is puzzled to know what the matter is.

It more often happens, however, that the doctor is not an ambitious fellow. He is generally a lazy fellow content to say anything that he thinks will make a good impression. The easy-go-lucky, well-fed, rollicking fellow in his medical sluggishness goes from woman to woman casting slurs on the ovaries. If the ovaries have proved to be damaging and useless to woman, they have, at least, proved of great value to the doctor and to do without his ovaries is impossible to imagine. He certainly could not practice medicine very long unless he went to

some mining camp or joined the army where he would have no use for ovaries in any event.

But there has an enemy arisen in the medical camp who threatens to destroy the vocation of the ovary doctor. This enemy is the ovariologist. The ovary surgeon does not content himself with simply slandering the ovaries, he goes to work and cuts them out. Every woman he deprives of her ovaries is unfitted forever of being any use to the ovary doctor. Having got rid of her ovaries, she has a right to expect of him something else besides the old song and dance that her symptoms are due to congested ovaries.

Having had the good luck to return from the hospital alive minus her ovaries, the next time her family physician comes dawdling around with a bottle half full of coal tar tablets rattling in his hip pocket, he will have to invent some new story. It won't do for him to select the kidneys because the people know a little too much about the function of these organs to have every possible and impossible symptom referred to them. We would suggest to these ovary doctors the supra-renal capsules as being available organs in this dilemma.

As soon as a woman is deprived of her sex by the ovary surgeon, the ovary doctor then can change his base of action from the ovaries to the supra-renal capsules. This would be perfectly safe and business-like. No one knows what the supra-renal capsules are or what sort of disturbance they would set up in the system in case they were diseased. This will put these

heretofore useless and generally overlooked organs to some practical use. The existence of the supra-renal capsules shall have been vindicated as soon as they have been made to bear the opprobrium which the ovaries have so long borne.—*Medical Talk.*

On the Home Treatment of Pulmonary Tuberculosis.

L. Weber, New York, states that by physical exploration, including bacteriologic examinations, we can generally soon arrive at the positive diagnosis of the early stage of pulmonary tuberculosis. So long as we have to go without a sure and readily made serum diagnosis for incipient tuberculosis, let us give a suspicious case the benefit of the doubt, and rather treat the patient as if he were infected with tubercle than give him medicine for latent malaria. The first order given in a case of fresh febrile tuberculosis is that the patient should go to bed and stay there until his temperature is practically normal. Rest cure at the outset, to be repeated at intervals according to the circumstances of the case, and careful nursing, are essential for successful treatment. The patient's room must be well above the ground, must admit plenty of light and air, and be easy to ventilate. Food, selected according to the condition of the case, is given every two or three hours in small quantities, or in the shape of meals four times a day as soon as the patient is able to take and digest them. In the early stages, and at all times, it is of moment to keep

down high temperatures, for which acetanilid, phenacetin and antipyrin are advised. In fresh cases, with general irritability and harassing cough, remedies appropriate to a case of acute bronchitis with fever and cough should be given in preference to creosote or similar drugs. When the acute symptoms have subsided, or when they are absent, creosote is prescribed. For the class of patients who show phthisical habitus, have poorly developed muscles and weak hearts, cardiac tonics, such as strychnin, with or without digitalis quinin, are indicated. Whenever a stage of improvement has been reached where it appears timely and opportune to send the patient out of the city to continue the plan of treatment, it should be done. The author has treated one hundred and ten private cases, according to the above outlined plan; for every one creosote was ordered as the remedy to be taken steadily and for a long time, and at least four-fifths of them took it without objection or disgust; about one-fifth could not or would not take it, but had carbonate of creosote in capsule or carbonate of guaiacol in powder in sixteen-grain doses t. i. d. instead. Fifty of the whole number have been restored to health and twenty are greatly improved, while thirty have died of phthisis pulmonalis.

Internal Medicine—Inebriety.

C. L. Dana, New York, gives further details regarding the development of the inebriate. In his discussion he shows the rather definite limitations of

life of the sot and the periodical inebriate, the maximum capacities of the human body for alcohol, the methods of prevention, the necessity of a special law for the commitment and care of inebriates, and the treatment, temporary and permanent of this class. He has found the acute effects of hard drinking to be distributed about as follows: Simple intoxication, 60 per cent; delirium tremens, ending in recovery, 36 per cent; delirium tremens with complications, ending in death, 4 per cent. These acute conditions occurred in persons suffering from what may be in general termed inebriety, which took the form of periodical inebriety in about 10 per cent; chronic or neurasthenic inebriety in 20 per cent; ordinary drunkenness or besottedness in 70 per cent. The agencies for preventing and lessening the injury done by alcohol consist in: 1. Teaching. 2. Control of the sale, making it impossible to secure impure alcohol and difficult to secure even good alcohol, and especially difficult for those to whom it is poison. 3. Avoidance of transmission of degeneration through the marriage of alcoholics. 4. Personal supervision of those who become inebriates. The treatment is considered under the classification of the ideal and the practical. The former is supervision of the case in an institution, ensuring absolute abstinence from alcohol in all forms for at least one year, and further observation for two years longer. Under present conditions all kinds of makeshifts have to be resorted to, the most common form being the "cure." These cures have all the same

basis, consisting in the use of strychnin, atropin, and apomorphin or some other nauseant, combined with tonics, laxatives, full feeding, and the psychological influences, exercised on the patient by the procedures of the cure.—*New York Medical Journal*.

Large Doses of Tincture of Iron in Malaria.

Dr. R. Prichard strongly recommends the tincture of ferric chloride in malaria. He orders 15 to 20 min. with $\frac{1}{2}$ or 1 grn. of quinine, sweetened with syrup, every hour during waking hours. In a case of apparently hopeless quotidian, with great anemia, the effect of this mixture was marvelous. In six very bad cases of quotidian and in several milder attacks, there has not been a single subsequent rigor, recovery has been rapid, and the liver and spleen have been reduced by inches within a fortnight. There was no digestive disturbance, headache or cinchonism. Quinine, the doctor says, even in large doses, does not produce this result.

In the later issue of the same journal the doctor publishes a letter which he received from a physician in Jamaica, very strongly corroborating the claim made as to the value of tincture of ferric chloride in malaria. He used it in two of his sons who were suffering from a low form of malarial fever, resulting in anemia, emaciation, and great debility. Both cases were cured by the tincture of iron in spite of the fact that the writer lives in one of the most unhealthy places in the island. In one case, that of a colored man,

who was profoundly anemic, with puffy face, edema of the legs, weak heart, and a spleen that nearly filled the abdominal cavity, the tincture produced a *marvelous* change within a week. The writer concludes with the query: Can it be that the iron helps the red corpuscles to resist the attack of the parasite, or does it destroy it?—*Massachusetts Medical Journal*.

How to Prevent the Spread of Contagious Diseases.

1. Isolating our patient.
2. Having only one member of the family act as nurse to devote her whole time to the patient and prevent other members of the family and visitors from having access to the sick-room.
3. We can have the excretions and expectorations in such diseases as typhoid fever and diphtheria received in disinfectant solutions, and burned or otherwise properly disposed of.
4. We can have clothing and bed-clothing thoroughly boiled and the furniture, floors and walls scrubbed with some disinfectant solution; those recommended by the State Board of Health are good and not expensive.
5. We can have the patient bathed and disinfected before we let him mingle with the public.

These few points seem simple, and one would think any family would be glad to adopt such procedures. It is hard though to have even that much done. So many people seem to be fatalists and say: "If the disease is going to spread it will spread, and what is the use of trying to prevent it?"

By taking the heads of families into our confidence, and instructing them as to the danger of contagion much good may be accomplished.—*Mass. Medical Journal*.

Preparatory Obstetrics.

The time has passed when pregnancy and labor can be regarded as normal and physiological processes; otherwise there would be no obstetricians nor, for that matter, any midwives or nurses. The woman would retire to a convenient part of the house at the outset of labor and after a short time bathe the baby and herself, dispose of the secundines, and possibly lie down to rest for a few minutes before rejoining her family—just as her savage sister does to-day.

Impress upon your own obstetric patients that it is absolutely essential for them to place themselves under your care as soon as they know that they are pregnant, and to conform implicitly to your directions, until you yourself "discharge them cured" at the end of puerperium. Examine the heart, lungs, liver and spleen early in pregnancy, and take external pelvic measurements not later than the sixth month. Analyze the urine regularly once a month until the end of the seventh month, and then once a week till labor occurs. Test for albumen, urea, and sugar.

If the urea falls below 1.5 per cent. have the twenty-four hours quantity measured and determine the total amount of urea excreted in that length of time. If this amount is less than

300 grains put your patient on a milk diet until it comes up.

Determine the position and presentation of the foetus in the eighth month, and, if it is abnormal, correct it by external version. Make subsequent abdominal examinations at intervals of one or two weeks until labor takes place.

Instruct your patient how to prepare her room and bed for her lying-in, and give her a list of the articles she will require at the time of her labor.

Respond promptly to every labor call. Take with you everything essential to the maintenance of absolute asepsis from the beginning to the end, and everything that you may need in an emergency, such as sterile gauze for packing the uterus in the event of hæmorrhage, drugs for the treatment of eclampsia, and the like.

These articles take up very little room in the bag, and a man may better carry them all his life to no purpose than to lose one patient for want of them. Regard every labor as a surgical procedure, and conduct it as such. Treat your post-partum patients as you would any other surgical convalescents.—COOKE (*Journal of Surgical Technology*.)

Creosote is one of the serviceable remedies in affections of the skin to which but little attention has been paid in the infiltration so often observed about the edges of lesions or of ulcerative processes, which seems to persist despite the most persistent and well directed efforts. By painting on the pure creosote two or three times a week good results are observed to follow a comparatively short time.

College, Alumni, Personal

The regular term of lectures begins October 7th. Students should be matriculated and secure boarding places before that date so that they may be free to attend the first lecture and pursue their studies without distractions.

There is an excellent location at Concord for a good eclectic who wishes to be near the City. The right man will do a good business if he attends to it, and we would like to have one of our boys there. Also a "good thing" in Amador Co. Write us.

Dr. J. G. Murrell, '91, has located in Dixon, Dr. Von Gerichten having decided to return to Oakland.

Dr. W. P. Scott, '99, was in town from McKittrick recently. He has sued the Superior Sunset Oil Co. for \$2,000 for medical services. Dr. Scott has attained a well deserved reputation as a surgeon, and his services are in demand throughout the Kern Co. oil district.

Dr. Tillie Campbell, '92, has removed from Oakland to Los Gatos.

Dr. J. C. Bainbridge, '94, of Santa Barbara, was in this City during September. He is well and prosperous, and has acquired considerable property in the Southern City. Dr. G. S. Coates, '96, is attending to Dr. Bainbridge's practice during the latter's absence.

Dr. H. Kloppe, '01, is well pleased with his location at Kerby, Ore. We

are always glad to hear from our graduates, and though we seldom have time to reply to all, yet we do our best to keep up their interest in local affairs.

Dr. W. B. Church, for many years Prof. of Physical Diagnosis and Diseases of the Chest, in the College, has removed to Holland, Mich., and will remain. Dr. Church took an active interest in College and State Society affairs and his absence will be regretted by all.

Dr. E. H. Byron, '00, and Dr. J. Harding-Mason, '00, have offices together in the Columbian Building.

Doctor: are you getting into line with the men who have undertaken to advance *everything* eclectic on this Coast? Have you attended the meetings? If not, you have missed something which beats the State Society for enthusiasm. You'd better come next time. "There is something doing," and this is your opportunity to help do it.

The Indiana Legislature has passed a bill providing for the appointment of a marriage commission, to be composed of two women who are mothers, two physicians of note, and one attorney. The duties of the commission are to prepare a set of questions which it is proposed to require candidates for marriage licenses to answer, the idea being to prevent marriages between the unfit.

Try atropine in dysmenorrhea (large doses); it controls pain.

CALIFORNIA MEDICAL JOURNAL.

PUBLISHED MONTHLY.

H. Bosworth Crocker, M. D.,**Editor and Manager.**

\$1.50 Per Year, In Advance.

Single Copies, 15 Cents.

The Editor disclaims any responsibility for the statements or opinions of contributors.

WE INVITE CONTRIBUTIONS FROM ALL.

Manuscript should be folded and re-written before mailing. PRESERVE A COPY, as positively no MSS. will be returned, whether rejected or not.

Subscribers failing to receive the JOURNAL must notify this office within thirty days. Otherwise no duplicate copy will be sent gratis.

NOTICE:—We are not clairvoyant. When you move, drop us a postal card with your new address

Let all communications be addressed and money orders be made payable to the

CALIFORNIA MEDICAL JOURNAL,

1422 Folsom Street,

San Francisco, - - - California

Editorial.

Progress.

We presume that you are anxious to learn just what has been accomplished by the rustlers who have undertaken to remove the "rust" which has impeded the advance of Eclecticism in California. During the past month a permanent organization has been formed composed largely, but not entirely, of graduates of the California Medical College. All reputable practitioners have been invited to join this "Anti-Rust Society," and care will be taken to exclude all others. Meetings have been held every Thursday evening at the place named in the first announcement, and a definite plan has been agreed upon for the accom-

plishment of the purpose for which the meetings were called. Everything promises well, and for once, there is perfect harmony.

It will be a matter of four or five months before various technical and legal arrangements can be perfected, but if the work goes on with the smoothness and enthusiasm so far manifested, there is no reason to doubt that the new college proposition will be fairly launched early in the new year. We are making each move with caution and the perfect organization which must result will amply compensate for the slight delay. We will start right and be sure we're right before we attempt to go ahead.

In the meantime, all who have been invited are requested to attend the weekly meetings. We want your ideas. This is a movement which is of vital importance to every eclectic on this Coast and especially to every graduate of the college. It was conceived by the younger men, and has been helped and encouraged by the wise counsel of those who have borne the burden for twenty odd years. The College as an institution belongs to everyone of us, share and share alike; and her future depends upon no one but ourselves. If this proposition succeeds, as it most certainly will, the California Medical College will have the finest home of any eclectic institution in the country and be assured of a prosperous endurance for all future time.

The plan is a grand one, but it can be carried out in all its details if we all get together and work. It is not a matter of money so much as a cordial

support which we need now. Come to the meetings if possible, but if you can't do that, send in your name to the secretary, and put yourself in line with the handfull of men who are working for the college. There will always be some who are willing to reap the benefit and let others do the work. How shall we class you? The officers of this society are as follows, and any communication will receive prompt attention:

Pres. Dr. J. B. MITCHELL,

664 Geary St.

Vice-Pres. Dr. H. W. HUNSAKER,

Parrott Building.

Treas. Dr. B. STETSON, Oakland.

Secty. Dr. H. BOSWORTH CROCKER,
21 Powell Street.

A Criticism.

"Perhaps the most important matter decided by the Illinois State Medical Society was the admission of homeopathic and eclectic graduates to membership. Remarkable as it may seem to some of 'Ye Olden Tyme Docktors' the following resolutions were unanimously adopted:

Resolved—That school of graduation shall be no bar to membership in the Illinois Medical Society, provided such physician is recognized by the local society as qualified and not claiming to practice any exclusive system of medicine.

From the action of the Illinois State Medical Society the regular medical profession of that State will hereafter affiliate with the irregulars in the profession. The code of ethics of the

American Medical Association is the highest moral code known to physicians outside of the Bible. It is framed both for the protection of physicians and against irregulars and dishonest persons who claim to be doctors, and for the protection of suffering humanity. And no regular physician can affiliate without violating its plain provisions. When a student graduates from a regular medical school, subscribes to the code of ethics, and goes to its associations and meeting with irregulars in consultation, he does himself and those with whom he is professionally connected as much hurt as he would were he to violate his obligation in his church relationship, or to his political party or lodge. It has a moral obliquity in either case which is inexcusable and indefensible upon moral grounds.

The regular school teaches all that is known or worth knowing in everything pertaining to the practice of medicine and surgery. All of the great men whose names have resounded throughout the earth on account of their great knowledge and grand achievements in medicine and surgery have belonged to the regular schools of medicine.

While it is true medicine and surgery is not, and in the very nature of things cannot be an exact science, yet there is approximation to the truth by somebody. Is it not reasonable to conclude that this approximation must be made by those who have given to the world its medical literature, and who have furnished all of the great discoveries in medical science, and all the

grand and successful operations in surgery that has benefitted and blessed suffering humanity?" G. HENDRIX, in *Okla., Med. News*.

We are surprised that this article should have been given publication in any medical journal, no matter how "regular." The author is assuredly an "Olden Tyme Docktor;" so much so in fact, that he has fallen *behind* the times. Such hysterical manifestations of senility in a Rip Van Winkle "regular" should be suppressed. They have a tendency to keep alive the spirit of discord, bigotry and intolerance which has disgraced the medical profession and made it ridiculous in the eyes of the laity. Under the influence of a liberal medical press, and the various State medical societies, the different "schools" of medicine are being gradually drawn together, and the claims and discoveries of each are being investigated, adopted or rejected by the others. In nearly every State we now have examining boards composed of representatives from all "schools" of practice! Our medical journals are publishing articles because of their real worth, and irrespective of the author's affiliations; and in many States there are annual joint meetings of practitioners of all systems, convened for the friendly discussion of medical progress.

It is therefore disgusting to any modern, broad-minded physician to read such an agglomeration of rancorous untruths as the above, and we regret to see it published by a journal which is making its first bow. The editor of a journal is not responsible

for the opinions of contributors but he should have some regard for the eternal fitness of things and should not forget that this is the twentieth century.

Examination for Army Medical Department.

The examination of applicants for appointment of Assistant Surgeon in the Army has been resumed in Washington and San Francisco; the Army Medical Boards convened in those cities will remain in session so long as there are candidates to be examined. Seventy-six vacancies in the medical department still remain to be filled, and as it is desired by the military authorities that the Department be filled up to its full legal limit as early as practicable, all eligible applicants will be afforded opportunity for examination; those found qualified will be commissioned at an early date. Full information as to eligibility, nature and scope of examination, etc., may be obtained upon application to the Surgeon-General, U. S. Army, Washington, D. C.

Assistant Surgeons receive \$1,600 per annum and at the end of five years' service the pay is increased to \$2,200. This includes quarters, commissary privileges, use of instruments, library, etc.

Admission to the medical corps of the army is not restricted to any "school" of practice. The term "regular medical college" as used in the circular of information means any legally conducted medical college.

We have secured the opinion of the

Surgeon-General on this point in the belief that some of our graduates might desire the information.

Candidates should apply to Col. Girard, at the Presidio, S. F.

Good Friends of the Doctors.

Having occasion to spend a day in Cincinnati during the month of August, we took the opportunity of making visit to the very complete and perfectly appointed drug manufacturing establishment of William S. Merrell Chemical Company. We went over the entire establishment, from cellar to attic, first making for our entrance into the busy office, with its two score or more bright and busy young ladies making the typewriters hum in looking after the immense correspondence and other clerical details. Mr. Charles S. Merrell, whose young, bright and handsome countenance is only excelled by the clearness and beauty of the chemicals being sent out over the world by this house, placed us in charge of Dr. Chamberlin, connected with the scientific department, who conducted us over the entire establishment. Ah, but the retorts, the crucibles, the evaporators, in their Brobdignagian proportions were enough to have startled even the ghost of Galen himself, and then with their remarkable capacity their cleanliness was equally remarkable.

All the various manufacturing devices and apparatus for the making of pills, pearls, granules, etc., and for coating with sugar or enveloping in gelatin were of the latest and most

improved design. In one room apparently sufficiently well equipped for a successful search for the philosopher's stone, or even the elixir vitæ, were two expert and efficient chemists whose entire time was occupied in assaying crude drugs and finished products.

Here was in large receivers such old friends as podophyllum, prickly ash, nux vomica, and other foreign and domestic crude drugs that had been reduced to the perfection of alkaloidal purity and definiteness of strength. Bales, boxes, bundles, cartons, barrels and other containers brought from far and near. A busy hive indeed from basement to top floor, from business office to packing room, the tinctures, normal liquids, powders, pills, granules, sugar and gelatin coated, all a marvel of neatness, cleanliness and perfection of pharmaceutical detail.

Their salicylic acid, and its compounds, made from the pure and natural oil of wintergreen—and not from the synthetical oil as has been done, a no less crime than the foisting of the synthetical acid on an unsuspecting public.

A marked feature of their entire production is limiting everything to the strictly ethical—so that the label on the package can be taken to indicate exactly the contents of that package, nothing secret, no, not even proprietary—all pure and strictly galenical preparations, whether it be a simple tablet of morphia or strychnia or a compound of specific composition.

Well, we have for years never been disappointed in any reasonable effects expected from a preparation coming

from the William S. Merrell Chemical Company, and now we know the reason. It is simply honesty in all that comes from their hands.

We are gratified at being informed that they have just completed the purchase of quite a large contiguous area in their immediate vicinity, that in a very short time will be occupied by new buildings needed to accommodate the increasing demands for their most excellent products.—*Editorial in Southern Practitioner.*

Special Notices.

Testimonial to Dr. Davis.

Under the auspices of the Chicago Medical Society a banquet and celebration has been organized in honor of Dr. Nathan Smith Davis, M. D., L. L. D., who is the oldest living president of the Society and widely known and honored among the profession by his long connection with the American Medical and other associations. The banquet will take place at the Auditorium Hotel, Chicago, Saturday evening, October 5, 1901.

Book Notes.

ALL BOOKS reviewed in these columns may be examined by prospective purchasers, at the JOURNAL Editorial rooms from 10 to 12 daily, within thirty days of the appearance of the review. We invite students to examine these publications. Publishers will please notify us of the net price of all books.

Diseases of the Eye; a Manual for Students and General Practitioners—By Charles H. May, M. D. Published by Wm. Wood & Co., New York.

This is a book of small size but it is

just what its name signifies—a manual. Students could not possibly secure a better book for use in connection with their ophthalmological lectures and we heartily wish that some of our friends in general practice might have this little work as an aid to diagnosis. There would then be fewer costly mistakes and the work of the oculist would be aided, instead of being hampered by faulty first treatment as at present. No space is wasted upon lengthy theoretical discussions of rare affections which only interest the specialist, but the common diseases, with diagnosis and treatment are treated in a concise and practical style.

The book is amply illustrated and contains several colored plates showing pathological conditions of the fundus.

Estivo—Autumnal Malarial Fevers.—By Chas. F. Craig, M. D., Acting-Assistant Surgeon, U. S. Army, etc. Published by William Wood & Co., 51 Fifth Ave., New York.

The author deals in a masterly manner with a subject which is much neglected by writers of medical text-books and one which is of the utmost importance to the profession. To quote from the introduction: "The work is very largely the result of personal experience, gained in the United States military hospitals, and, as such, embodies the conclusions arrived at from nearly three years of investigation and the careful study of hundreds of cases of the estivo-autumnal malarial fevers. A great majority of the cases have been malarias contracted in Cuba and the Philippines, and it is believed that,

whatever the short-comings of the results obtained may be, the material for study has never been excelled."

The book is as complete a treatise as it has ever been our pleasure to review, and notwithstanding that the author has omitted nothing, it is especially worthy of note that no immaterial matter has crept in. It is very seldom that an author, ambitious to produce a volume of respectable proportions, shows the fine sense of discretion which Dr. Craig has displayed. We trust that the author will contribute many more such ably written books to our literature, but should he not do so, this work will stand as a model of simplicity, brevity, and perfect logical arrangement of subject matter. It is amply illustrated by colored plates and temperature charts and the work of the publishers is according to their usual standard of excellence.

Clinical Examination of the Blood.—By Richard C. Cabot, M. D. Published by William Wood & Co., 51 Fifth Ave., New York.

The value of examination of the blood for diagnostic purposes has only recently been duly appreciated and the field offers much encouragement to patient investigators. Patient they must be for the work is often disappointing in the extreme.

The book is now in its fourth edition and the text has been almost entirely re-written. The section on serum diagnosis has been abridged, and the table of contents abbreviated so that in spite of so many pages of new matter, the book is not greatly increased in

size. The most extensive changes are in the sections on pernicious anaemia, leukaemia, typhoid fever, and the diseases due to animal parasites. This is a line of study which is interesting to all practitioners who are modern in their ideas and practice. The examination of the blood requires very little time and no very expensive or elaborate apparatus; and when we consider that it is the only tissue of the body which we can examine during life, the acquisition of the necessary technique should not be delayed. We recommend this work as the most modern and complete on the subject.

Pathological Anatomy and Histology—By Profs. Delafield and Prudden. Published by William Wood & Co., 51 Fifth Ave., New York.

When a work like this one has reached its sixth edition little remains for the reviewer to do except possibly to mention some of the changes and improvements.

In this edition, particular attention is called to the relationship existing between pathology and the allied phases of biological science, and the disease and its lesions in relation to the doctrines of evolution. An effort has been made to view pathology as one aspect of the diverse manifestation of life and of energy, rather than of belonging to a special and exclusively human domain. The work has been revised throughout but Dr. Delafield has had no part in the preparation of this edition. Many sections have been entirely rewritten and a large number of new illustrations have been added to supplement or replace the old.

Neurotic Conditions of Climacteric Period.

This form of neuroses is considered by the latest and best authorities as essentially hysterical and neurasthenic; a statement that seems borne out at least in part by the predominance of the various reflexes. How far the latter condition may be due to irritation of the nerve-ends in the ovary depends, it would seem, on the degree of atrophy and consequent contraction of the tissues. The ordinary physical disturbances due to menstruations in some cases persist and cause various phenomena and often much annoyance. And while many of these symptoms may be, and some of them doubtless are, neurasthenic, it will be found wise not to abandon special medication. In the greater number of cases, two five-grain antikamnia tablets repeated every hour if necessary, will be found to give

entire relief. Under this treatment the reflexes are naturally abolished, the nerves are soothed and the system returns to its normal equipoise. Antikamnia tablets are essentially pain-killers, yet in this instance they nullify the reflexes almost as precisely after the same physiological fashion, so to speak, as they relieve pain, and without unpleasant after-effects. In cases of threatened metrorrhagia it is always advisable to administer "antikamnia and codeine tablets" as frequently as may be found necessary, say one every hour until six are taken. (George Brown, A. M., M. D., Atlanta Ga.)

Sanmetto in Enuresis.

I used Sanmetto in a case of a young miss, thirteen years of age, who was becoming a regular "wet the bed." I had tried all the usual remedies, but



RIDER AGENTS WANTED

one in each town to ride and exhibit a sample 1901 model bicycle of our manufacture. **YOU CAN MAKE \$10 TO \$50 A WEEK** besides having a wheel to ride for yourself.

1901 Models High Grade Guaranteed **\$10 to \$18**

'00 & '99 Models Best Makes **\$7 to \$12**

500 Second Hand Wheels **\$3 to \$8**

taken in trade by our Chicago retail stores, many good as new....

We ship any bicycle **ON APPROVAL** to anyone *without a cent deposit in advance* and allow

10 DAYS FREE TRIAL. You take absolutely

no risk in ordering from us, as you do not need to pay a cent if the bicycle does not suit you.

DO NOT BUY a wheel until you have written for our **FACTORY PRICES and FREE TRIAL OFFER.** This liberal offer has never been equaled and is a guarantee of the quality of our wheels.

WE WANT a reliable person in each town to distribute catalogues for us in exchange for a bicycle. Write today for free catalogue and our special offer.

J. L. MEAD CYCLE CO., Chicago.

failed to make a cure; so I tried Sanmetto, and the result was a perfect cure, as she has not been troubled since the first treatment with Sanmetto, and I inquired to-day, and was informed that she had attended school, traveled two hundred and fifty miles, losing two nights' sleep but not once has the trouble returned; therefore, I call it a cure in every sense of the word, and another triumph for Sanmetto. I can say that in over forty-six years' practice I have never found a medicine that is as near a specific for the purposes intended as Sanmetto.

WM. H. ANDERSON, M. D.
Soda Springs, Idaho.

"Since I have been acquainted with Hagee's Cordial Cod Liver Oil, I have prescribed it exclusively whenever I have had occasion to use such a remedy. I consider it the best preparation of cod liver oil on the market."—
Paul C. Skiff, M. D., New Haven, Conn.

Owing to the great increase in the substitution of inferior and harmful remedies for those of well-known and proven value, we advise purchasers for their protection, to insist on having Celerina, and not to accept anything that is offered as "just as good," or cheaper, which unscrupulous druggists continue to offer in order to make a few cents more.

Sanmetto in Urethral Stricture.

Dr. Jos. Swindell, of West Burlington, Iowa, writing, says: "I have been using Sanmetto for several years. I

find nothing that suits me as well in genito-urinary diseases. I am using it right along in conjunction with treatment of urethral stricture. It soothes, checks and prevents smarting and inflammation that is so common after passage of bougie. Its ease of administration and formula should recommend it to the profession."

Dehydratine, the perfect poultice and dressing.

"I have been prescribing the elegant and efficient Cordial Cod Liver Oil (Hagee) for several years and find it superior to anything of the kind on the market. My patients will have no other."—Virgil McDavitt, M. D., Quincy, Ill.

LATEST ECLECTIC WORKS.

- Annual of Eclectic Medicine and Surgery, by John V. Stevens, M. D., vol. viii, '97-'98, 588 pp., cloth, \$2.00.
Eclectic Materia Medica and Therapeutics, by Finley Ellingwood, M. D., royal octavo, 776 pp., cloth, \$5.00; sheep, \$6.00.
Deformities, by Edward J. Farnum, M. D., royal octavo, 554 pp., 208 illustrations, enameled paper, cloth binding, \$5.00.
American Dispensatory (King), by Harvey W. Felter, M. D., and John Uri Lloyd, Ph. M. New edition. Entirely rewritten and enlarged. Two-volume edition, royal octavo, each volume containing over 950 pp., with complete indices, both volumes now ready, price, cloth, \$4.50 per volume; sheep, \$5.00 per volume, postpaid.
Diseases of the Eye, by Kent O. Foltz, M. D., 12mo., 566 pp., fully illustrated, price cloth, \$2.50.
Stringtown on the Pike, by John Uri Lloyd, price, cloth, \$1.50.
Any of these works sent postpaid on receipt of price.

John Fearn, M. D.,
Box 1, Oakland, Cal.

IMPORTANT

Lac Bismuthi cum Pepsino (Worden)

THIS preparation combines the properties of the insoluble bismuth salts with those of pepsin, hydrochloric and lactic acids. Its special claim to recognition over similar combinations when extemporaneously prepared resides in the form of bismuth employed, which occurs as a non-alcoholic, aqueous magma in which the particles of bismuth present under the microscope a condition of division far smaller than the corpuscles of the blood. This minute division enormously increases the coating power of the bismuth and consequently its soothing sedative, astringent and aseptic influence upon the gastro-intestinal mucous membrane. Therefore, to secure the advantages of this valuable gastro-intestinal, sedative, antiseptic and digestive, please specify

LAC BISMUTHI cum PEPSINO—Worden.

SEND FOR LITERATURE.

**Clinton E. Worden & Co.,
SAN FRANCISCO.**

CALIFORNIA MEDICAL COLLEGE.

Board of Trustees.

D. MACLEAN, M. D.	President	San Francisco
M. H. LOGAN, M. D.	First Vice-President	San Francisco
F. CORNWALL, M. D.	Second Vice-President	San Francisco
J. W. HAMILTON, M. D.	Treasurer	San Francisco
G. G. GERE, M. D.	Secretary	San Francisco

Faculty.

D. MACLEAN, M. D., Donohoe Bldg., <i>Dean and Professor of Obstetrics.</i>	W. B. CHURCH, M. D., 611 Polk St. <i>Professor of Physical Diagnosis and Diseases of the Chest.</i>
J. W. HAMILTON, M. D., Parrott Bldg., <i>Professor of Gynecology.</i>	H. W. HUNSAKER, M. D., Parrott Bldg., <i>Professor of Otology, Rhinology and Laryngology</i>
GEO. G. GERE, M. D., Parrott Bldg., <i>Principles and Practice of Surgery.</i>	H. BOSWORTH CROCKER, M. D., 21 Powell St., <i>Assistant to the Chair of Ophthalmology.</i>
L. F. HERRICK, M. D., Oakland, <i>Professor of Orthopedic and Clinical Surgery.</i>	R. J. SCHMIEDEL, M. D., 10 Turk St., <i>Instructor in Physics and Latin and Lecturer on Osteology.</i>
W. A. HARVEY, M. D., 201 Taylor St., <i>Professor of the Principles and Practice of Medicine.</i>	E. H. MERCER, A. B., M. D., 1508 Market St., <i>Lecturer on Angiology and Myology.</i>
B. STETSON, M. D., Oakland, <i>Professor of Therapeutics.</i>	W. O. WILCOX, M. D., 21 Powell St., <i>Lecturer on Diseases of the Genito-Urinary Organs and Demonstrator of Anatomy.</i>
A. E. SCOTT, M. D., 10 Turk St., <i>Professor of Diseases of Children.</i>	R. A. BUCHANAN, M. D., 493 Hayes St., <i>Lecturer on Hygiene.</i>
H. M. OWENS, L. L. D., <i>Professor of Medical Jurisprudence.</i>	CHAS. CLARK, M. D., 201 Taylor St., <i>Instructor in Histology, Microscopy, Pathology and Bacteriology.</i>
J. A. RILEY, M. D., Alameda, <i>Lecturer on Pharmacology and Materia Medica.</i>	J. A. MILLER, D.D. S., Parrott Bldg., <i>Instructor in Dental Pathology and Oral Surgery.</i>
F. CORNWALL, M. D., 208 Mason St., <i>Professor of Ophthalmology</i>	F. T. LAMB, M. D., Murphy Bldg., <i>Lecturer on Electro-Therapeutics.</i>
J. B. MITCHELL, M. D., 836 Sutter St., <i>Professor of Anatomy and Lecturer on Embryology.</i>	C. Z. ELLIS, M. D., Berkeley, <i>Assistant to Chair of Surgery.</i>
J. P. SCHMITZ, M. D., 1422 Folsom St., <i>Professor of Physiology.</i>	J. HARDING-MASON, M. D., Columbian Building, <i>Lecturer on Dermatology.</i>
M. H. LOGAN, Ph.G., M. D., 10 Geary St., <i>Professor of Chemistry and Toxicology.</i>	

For annual announcement giving all information address

D. MACLEAN, M. D., *Dean of the Faculty,*
Donohoe Bldg., San Francisco,

BAYER

TANNIGEN

INTESTINAL
ASTRINGENT

FERRO-SOMATOSE

The FERRUGINOUS
NUTRIENT

EUROPHEN

The ODORLESS AND
NONTOXIC IODOFORM
SUBSTITUTE

LACTO-SOMATOSE

THE FOOD IN
GASTRO-INTESTINAL
AFFECTIONS

PROTARGOL

The ANTIGONORRHOICUM
AND SUBSTITUTE
FOR SILVER NITRATE

SOMATOSE

NUTRIENT
TONIC, RESTORATIVE

EPICARIN

The NONPOISONOUS
DERMAL PARASITICIDE

TANNOPINE

The INTESTINAL
ASTRINGENT
and DISINFECTANT

HEDONAL

The PROMOTER OF
NATURAL SLEEP

HEMICRANIN

The SPECIFIC FOR
HEADACHE

ASPIRN

The AGREEABLE AND
EFFICIENT SUBSTITUTE FOR
THE SALICYLATES

FOR SAMPLES
AND LITERATURE
OF ABOVE PRODUCTS
apply to

PHARMACEUTICAL PRODUCTS

FARBENFABRIKEN
ELBERFELD CO.
40 STONE ST. New York
P.O. BOX 2600.

PAUL SEILER

Electrical Works

Telephone, Main 5454

Manufacturers and
Dealers in
Telephones,
Telegraph and
Electric Light
Supplies,
Electro Medical
Batteries, and
Repairing

PAUL SEILER, Proprietor

406 and 408 Market Street

San Francisco, Cal.



Every Ingredient is a Recognized Effective Agent.
R. Ichthyol, Tar, Turpentine,
Bergundy Pitch and Beeswax,
with an oleaginous base.

Combined they form the most scientific, penetrating, stimulating, antiseptic dressing that can be indicated in the treatment of Varicose, Indolent and Syphilitic Ulcers; Burns; contused and lacerated wounds, chronic and acute inflammatory infections of the skin and cellular tissues.

PIXINE attracts and absorbs all offending exudate from the seat of injury. **PIXINE** expedites perfect resolution and promotes absorption of cicatrix. **PIXINE** is an ungent of marked antiseptic, detergent, stimulating and non-irritant properties.

Manufactured for physicians use and prescription. Send for large trial jar and literature.

Two Oz. 25c. 1 lb. 1.00

At all druggists or sent prepaid.

A. W. HITT CO. 519 Mission St. San Francisco.

Pacific Coast Agents

Troy Chem. Co., Mfrs., Troy, N. Y.

SANMETTO FOR GENITO-URINARY DISEASES.

A Scientific Blending of True Santal and Saw Palmetto in a Pleasant Aromatic Vehicle.

A Vitalizing Tonic to the Reproductive System.

SPECIALLY VALUABLE IN
PROSTATIC TROUBLES OF OLD MEN—IRRITABLE BLADDER—
CYSTITIS—URETHRITIS—PRE-SENILITY.

DOSE:—One Teaspoonful Four Times a Day.

OD CHEM. CO., NEW YORK.

CAGTINA PILLETS

Will nurse the heart in the treatment of febrile, nervous and chronic diseases.

A tried and efficient remedy in functional heart troubles.

Dose.—One or two Pillets three times a day.

Samples mailed to Physicians.

SULTAN DRUG CO. ST. LOUIS.

SENG

Stimulates the flow of the digestive fluids and encourages natural digestion; thus promoting assimilation and nutrition.

Dose.—A teaspoonful before meals, the dose before breakfast preferably in hot water.

Sample to Physicians who will pay express charges.

Dr. E. R. Waterman, Pres.

Dr. A. B. Barnes, Med. Director

Established 1892

California - Willow - Bark SANITARIUM.



A purely vegetable cure for

Dypsomania, Morphine, Chloral,
Cocaine and Opium Habits

The Sanitarium is under the personal management of properly qualified and recognized medical practitioners.

We complete the cure under guarantee, and references will be furnished on application.

Sanitarium 1839 Polk St., San Francisco, Cal.

From Ferry Depot take Jackson Street Car. From Third and Townsend take Third Street Car; transfer to Clay West.

Correspondence Solicited . . .

. . . Cure Positive

TRY

UTICA

SOAPS

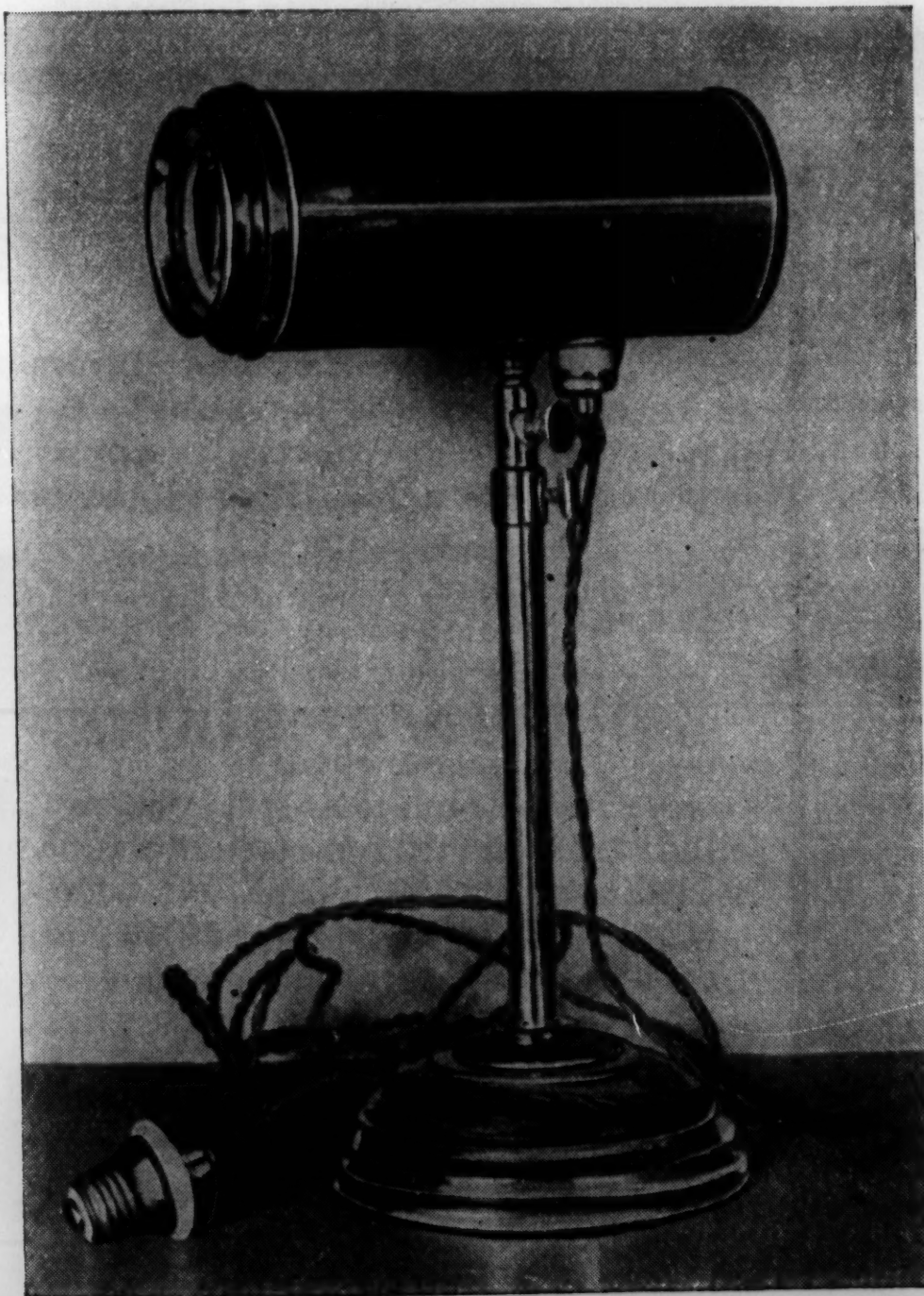
Toilet
Family
Laundry
Antiseptic
Salt-Water

SOAPS.

For sale at all groceries and drug stores

All Utica Soaps Contain the Celebrated Utica Cleansing Compound

OFFICE and FACTORY, 21 Spear St., SAN FRANCISCO



Surgeons'

"Search Light"

Indispensable for
Eye, Ear, Nose and Throat,
Gynecological, Rectal, Etc. Work.

A decided advantage of this Condensor over others is that the IMAGE of the CARBON FILAMENT is ENTIRELY OBLITERATED. With this instrument you get a strong, condensed light free from shadows of any kind.

In ordering, state what plug is wanted and kind of current used, direct or alternative.

PRICES:

- No. 1—Condensed Conjestor
24 Candle Power Lights, \$20
No. 2—Condensed Conjestor
50 Candle Power Lights, \$25

Write for Illustrated and Descriptive circulars.

Avery & Burrell,

Factory: 404 E. Superior st.,
Chicago, Ill.



Doctors ^{and} all Professional Men

YOUR attention is called to the fact that I make DRESSY SUITS and OVERCOATS for \$20, \$25 and \$30 that are worth double the money,

I make a specialty of DRESSY CUTAWAY AND PRINCE ALBERT SUITS, TUXEDO AND SWALLOWTAIL FULL DRESS SUITS, full silk lined, \$40—equal to any \$75 suit made by other tailors.

JOE POHEIM, THE TAILOR, 1110-1112 Market Street
201-203 Montg'y St.



Unlike Cathartics and Drastic Purgatives

CHIONIA BROMIDES

GENTLY STIMULATES THE LIVER AND OVERCOMES HABITUAL CONSTIPATION

GRADUALLY BUT EFFECTUALLY
DOSE: A teaspoonful 3 or 4 times a day.

Prepared from *Chionanthus Virginica*, from which the inert and objectionable features of the drug have been eliminated.

PEACOCK'S

Chemically Pure. Uniform in Strength.
Definite in Action.

DOSE: One to three teaspoonfuls as indicated.

Each fluid drachm represents 15 grains of the combined C. P. Bromides of Potassium, Sodium, Calcium, Ammonium and Litium.

Full size sample to physicians who will pay express charges.

HALF-POUND BOTTLES ONLY.

PEACOCK CHEMICAL CO., St. Louis.

BEWARE OF SUBSTITUTION.

Aletris

Cordial

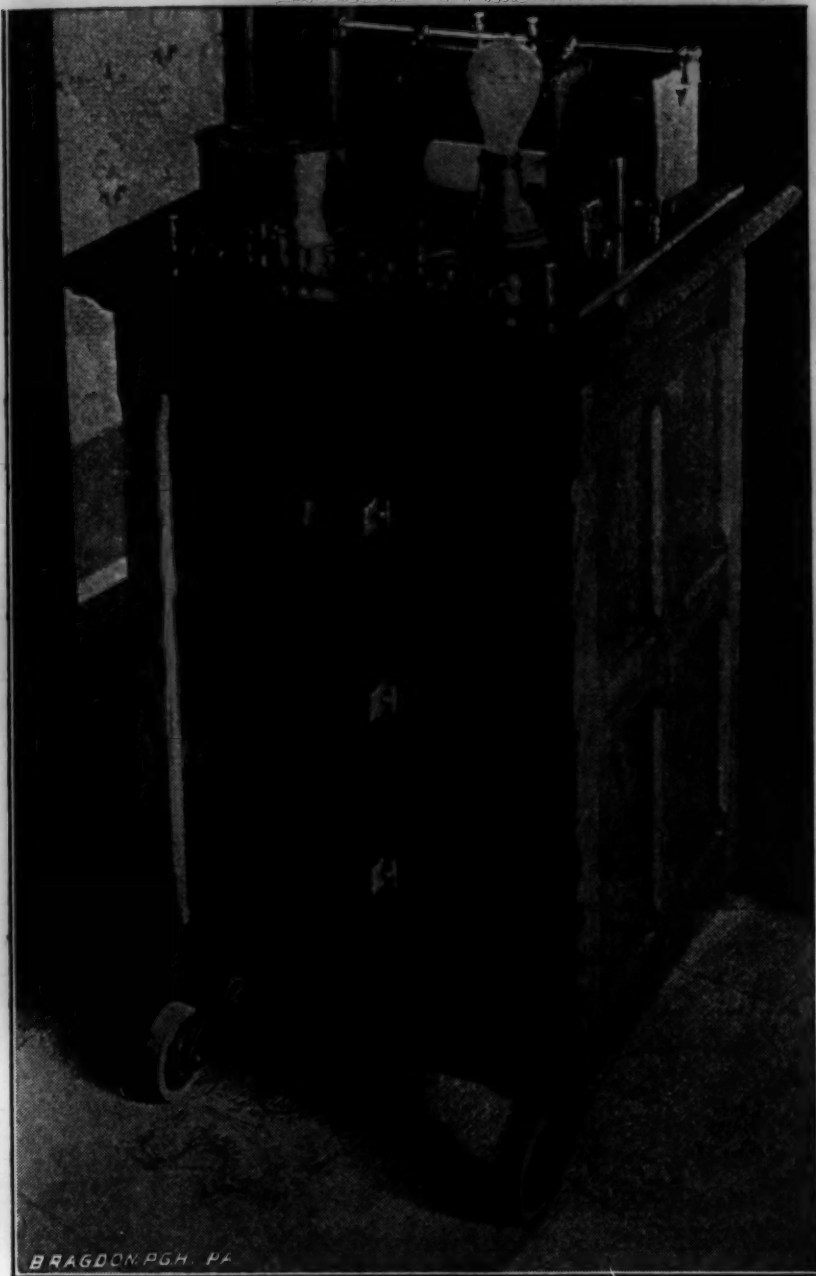
Aletris Cordial is an emmenagogue not abortifacient. It cures congestion of the uterus and ovaries, and favors the occurrence of the menstrual discharge. It is also especially appropriate when the amenorrhea depends

upon anemia. It regulates menstruation; namely, amenorrhea

dysmenorrhea and metrorrhagia, provided these disturbances be idiopathic. By curing menstrual disease, a common cause of sterility, it will also cure the sterility. It is recommended in erosion of the cervix and vulvar eczema.

RIO CHEMICAL COMPANY, St. Louis, Mo., U. S. A.

DOCTOR, DO YOU KNOW BRIGGS?



*He is the Doctor's Friend
He is the Surgical Chair Man handling
the Best Chair on the Market*

The "McDannold Chair."

It is simple, light, strong and durable, easily operated gives all known positions, rotates always on a horizontal plane, has vertical action and all the latest improvements. It is used and recommended by leading surgeons and gynecologists. Price \$50 monthly payments or \$45 cash.



Briggs can also supply you with a solid oak

Instrument Cabinet with plate glass sides, door and shelves, mirrored top, three large drawers. Price \$25 net cash. A cabinet is a necessity in every office.

Electrical Apparatus The kind that does not get out of order is an important factor in your success. Briggs can furnish you the "Shields Volt Graduator" in portable and cabinet forms. This instrument can be attached to any incandescent electric light socket, or may be used with a battery. It produces Faradic, Galvanic, Galvano-Faradic Sinusoidal, Diagnostic, Caustic and combination currents. Constructed on scientific principles. Thoroughly practical. Automatic devices to protect against accident. Impossible to short circuit or heat instrument. Buy THIS if you want the best. Prices \$10 to \$210. Special attention to mail orders. We go anywhere for business. All goods guaranteed as represented or your money back.

G. E. BRIGGS 708 Penn Ave **Pittsburg, Pa.**

Telephone, Main 5093.

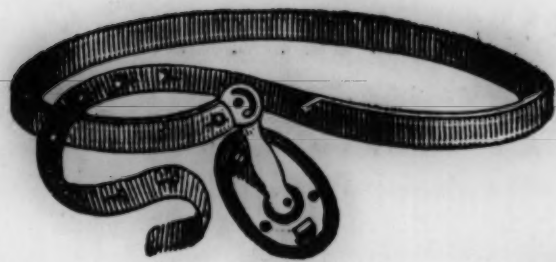
Pacific Coast Agency of

Sharp & Dohme's PHARMACEUTICALS, and SPECIALTIES

We carry in stock a complete line of the following goods: Benzothymol, Ergotole, Lapactic Pills, Mel Maroba, Lithiated Sorghum Co., Pan-peptic Elixir and Tablets, Santalets. Fluid, Solid, and Powdered Extracts, Pills, Elixirs, Resinoids. Hypodermic and Dispensary Tablets, Compressed Tablets, Tablet Triturates, Chocolate Coated Tablets, Lozenges, Syrups, Capsules, and Pressed Herbs.

J. M. WRIGHT CO., (Inc.)

14 First Street, near Market.



Ladies' Department
with Lady Attendant

Wm. Hatteroth

Surgical Instruments

Importer and Manufacturer of

Trusses, Elastic Hosiery, Electric Batteries,

Apparatus for Deformities,

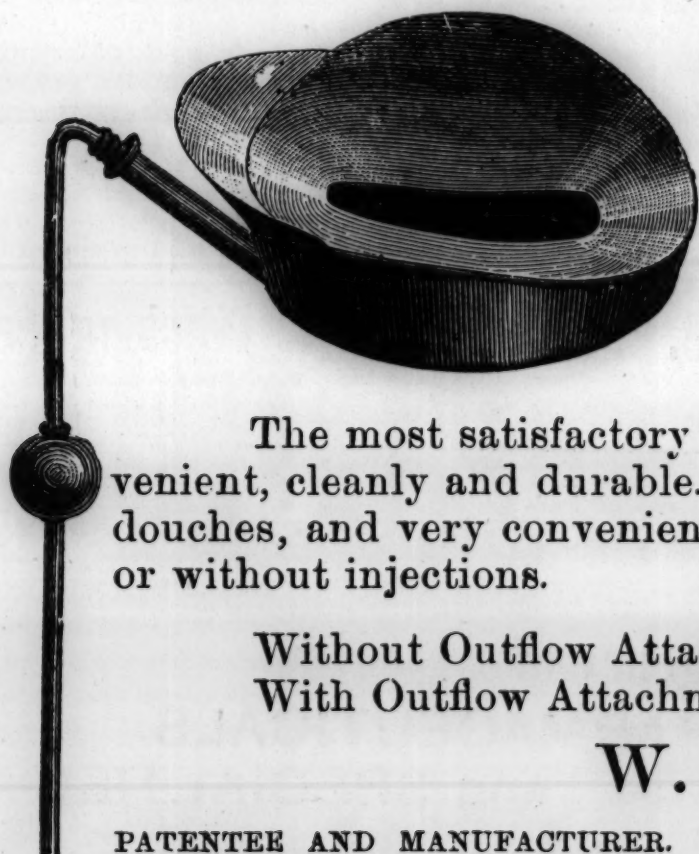
Physicians' and Hospital Supplies.

321-325 Kearny Street

BET. BUSH AND PINE

SAN FRANCISCO, CAL.

Telephone, Main 1748



SEARBY'S

HOSPITAL

BED PAN

(U. S. Patent.)

The most satisfactory Bed Pan in use. It is light, capacious, convenient, cleanly and durable. It is especially adapted to copious vaginal douches, and very convenient for receiving rectal discharges, either with or without injections.

Without Outflow Attachment
With Outflow Attachment

\$2.50.
\$3.50.

W. M. SEARBY,

PATENTER AND MANUFACTURER.

400 Sutter Street, San Francisco.

PAPER

This JOURNAL is printed on our "ALBION BOOK."

We carry a full stock of all kinds. **Powder Papers** a specialty. Samples and quotations promptly given.....

BONESTELL & CO., 401-403 Sansome St., 500-508 Sacramento St., San Francisco.

Telephone, South 394 **THE**
Electro : Therapeutic : Company.

Manufacturers
Importers
and
Dealers in



SURGICAL INSTRUMENTS

Electro-Medical Instruments,
Switchboards, Static Machines, Nebulizers,
Microscopes, Hospital Furniture of the
Latest Designs.

Our Stock is Entirely New. —:—

Electrical, Surgical and Hospital Requirements are our
Specialties. We also carry Hospital furniture in stock.
We manufacture Electro-Medical apparatus to order.

Send for Catalogue.

Rooms 597, 598, 599, Parrott Bdg, Fifth Floor, 855 Market St., S. F.


Polk's Medical Register

(Seventh Revised Edition.)

Will appear in due time. Send for descriptive
circulars. Physicians who have moved since
1898 should notify the publishers promptly.

Polk's Medical Directory has been estab-
lished 15 years. Do not be deceived by untried
and unknown imitations.

R. L. Polk & Co., Publishers,
DETROIT, MICH.



FERALBOLD
IRON
AS FOUND
IN THE YOLK OF AN EGG

A PERMANENT NON-LIQUID PREPARATION OF
THE ALBUMINATE OF IRON.
DOSE SMALL, FROM $\frac{1}{3}$ TO $\frac{2}{3}$ OF A GRAIN.
PUT UP IN TABLETS ONLY.

FERALBOLD PLAIN, GR. $\frac{1}{3}$.
WITH QUININE, FERALBOLD $\frac{1}{3}$ GR. QUININE 1 GR.
WITH QUININE & STRYCHNIA, FERALBOLD $\frac{1}{3}$ GR.
QUININE 1 GR. AND STRYCHNIA $\frac{1}{100}$ GR.
AND WITH MANGANESE, FERALBOLD $\frac{1}{3}$ GR.
AND MANGANESE 1 GR.

IF NOT PROCURABLE OF YOUR DRUGGIST, SEND
US \$1.00 AND WE WILL SEND YOU 150 OF THESE
TABLETS ANY KIND YOU SELECT.

THE ARGOL CO.,
CHEMISTS,
DANBURY, CONN., U.S.A.

A SURGICAL PROP.

LYPTOL

A PERFECT ANTISEPTIC OINTMENT FOR SURGICAL CASES.
Prepared only for the Medical Profession.

FORMULA: Hydrargyri Bichloridi, Oleum Eucalyptus, Formalin and Benzo-Boracic Acid, combined with a perfectly STERILIZED Petroleum base.

A one pound jar will be sent, carriage prepaid, on receipt of one dollar, to any part of the United States.

THE ARGOL CO., Danbury, Conn., U. S. A.
Literature on application.

**ECTHOL, NEITHER
ALTERATIVE NOR ANTISEPTIC
IN THE SENSE IN WHICH THOSE
WORDS ARE USUALLY UNDER-
STOOD. IT IS ANTI-PURULENT,
ANTI-MORBIFIC--A CORRECTOR
OF THE DEPRAVED CONDITION
OF THE FLUIDS AND TISSUES.**

SAMPLE (12-oz.) BOTTLE SENT FREE ON RECEIPT OF 25 CTS.

**FORMULA:--Active principles
of Echinacia and Thuja.**

**BROMIDIA
IODIA
PAPINE**

**BATTLE & CO.,^{CHEMISTS}
CORPORATION, ST. LOUIS, MO., U. S. A.**

IT STERILIZES THE BOWEL

by inhibiting and destroying the germ life which infects the alimentary tube in

GASTRO - INTESTINAL DISORDERS D Y M O L

is absolutely free from toxic properties or irritant effect on the mucous membranes. Its efficiency is due to its high anti-septic properties and to its stimulating action on the normal bowel functions.

Literature and Samples of

D Y M O L

(one grain tablets)

Will be sent free upon request

Stephen Girard Building,

LORD & LORD,
Philadelphia, Pa.

SURGICAL :: INSTRUMENTS



SUPPLIES,
SATCHELS,
MEDICINE CASES,
POCKET CASES,

And a General Line of SURGICAL
INSTRUMENTS.

GYNAECOLOGICAL INSTRUMENTS A SPECIALTY

Sole Agent for the ALLISON OPERATING TABLES.

N. W. MALLERY, Rooms 111 and 112 Crocker Building
(610 MARKET STREET)

Tel. Main 612

San Francisco, Cal.

THE FORMULA SPEAKS FOR ITSELF.

**WATERHOUSE
MEDICATED**

UTERINE WAFERS

FOR ALL UTERINE DISORDERS.

75¢ PER BOX.

SEND
FOR SAMPLES

THE FORMULA
SPEAKS FOR ITSELF.
EX. CALENDULA.
EX. TIGER LILY.
EX. JECURITY BEAN.
BORACIC ACID.

WATERHOUSE PHARMACY CO. 3115 S. 9TH. ST.
ST. LOUIS MO.

Your sample of Medicated Uterine Wafers received. Used them with most gratifying results in a stubborn case of Leucorrhœal Ulceration of Cervix and Prolapsus Uteri. I would not give one box of your uterine wafers for all the speculums and pessaries in use.—B. M. Zachary. M. D., Knoxville, Tenn.

I have been using the Waterhouse Medicated Uterine Wafers in my practice for a period of nearly five years, and find their merits in the treatment of the Functional wrongs of women to be even greater than is claimed for them; of great efficacy in all loose, relaxed state of the vagina, falling of the Uterus, Engorgement, Inflammation, Leucorrhœa, Catarrh, Ulceration, etc. I have never met with more gratifying results in cases of Cystitis, resulting from the Functional wrongs of women, than by the free use of the wafers. They prove a never-failing remedy when the complex generative

system of the female looses its tone, vigor and vivacity, when callousness has suspended enjoyment, when the sexual act is inoperative, when the vagina needs the aid of a vitalizer and contractor.—J. M. Stukey, M. D., Lancaster, Ohio.

I have had excellent results from the Waterhouse Medicated Uterine Wafers.—Dr. John Benson, Colfax, Neb.

I cannot treat female troubles successfully without them.—Dr. A. W. Calkins, Frontier, Mich.

Am sure any physician using them once would continue their use.—Dr. A. J. Elliott, Ann Arbor, Mich.

Enclosed find money for two boxes. They are excellent. If any change in location, keep me posted.—R. A. Rice, M. D., Galloway, Ohio.

ECHAFOLTA

THE BEST REMEDY
IN ALL

SEPTIC CONDITIONS.

"During the recent summer, I believed I saved the life of a little negro boy by the use of Echafolta and this remedy alone. He was about four years old, and his surroundings were of the most unsanitary character and his nursing the poorest imaginable. In spite of these unfavorable conditions he recovered after an exhaustive disease lasting more than two months. The trouble began very much like a case of continued fever, but of a low type. He continued to get worse and about the second week experienced an alarming condition approaching collapse. The heart action became very feeble and intermittent. Following this depression came an exhaustive diarrhea of a choleraic character. I easily controlled this diarrhea with rhus aromatica. At this juncture septic infection became evident and the lungs were involved with a pneumonia of quite pronounced severity. I then began administering ten-drop doses of Echafolta. This had the effect of mitigating the symptoms considerably, and in a few days his condition was so much improved that I stopped the remedy, and then the symptoms became greatly aggravated. I again resumed the Echafolta, when a complete change for the better took place, but it was followed by another profuse diarrhea and I discontinued the Echafolta and again controlled the diarrhea with rhus aromatica. At this stage of the disease (third week) circumscribed, inflammatory swellings appeared on various parts of the body. These were sluggish, and, at first, quite painful, but soon developed into abscesses and would break spontaneously, discharging a sanious and offensive pus. The abscesses continued throughout the course of the disease (ten weeks) and numbered at no time less than six, appearing chiefly near the joints, on the neck, in the groin, on the back and one on the scalp. Feeling convinced at the time that Echafolta was the only remedy administered that seemed to hold the disease in check, I put him on ten-drop doses every three hours and kept him on it until complete recovery took place. From what I observed in this case I believe that the boy could not have lived without the remedy, for whenever it was discontinued he became alarmingly worse, and whenever it was resumed, his condition became better so promptly that I could attribute it to no other cause. The boy to-day is strong and hearty and shows no ill effects of his serious illness."

H. W. FELTER, M. D., Cincinnati, Ohio.

Price Per Pound, \$2.00
Per ¼ Pound, 60 cts.

For Sale by over 200 Wholesale Druggists in the United States.
Order it from ANY CITY.

LLOYD BROTHERS, MANUFACTURERS, CINCINNATI, O.

THE KIND
THAT
KEEPS

DIOXOGEN

H_2 O_2 3%

formerly known as
oakland Hydrogen Dioxid

is offered to the Medical Profession
as being pure and entirely reliable.

Confidence in the Medicine is second
only to confidence in the Physician.

THE
OAKLAND
CHEMICAL
CO.

464
WEST BROADWAY
N.Y.

E. J. Wittenberg & Co., Pacific Coast Agents, 57-59 Stevenson St., S. F.



THE PYHSICIANS GUARANTEE CO.

A MEDICAL DEFENSE UNION.

Fort Wayne, Indiana.

Capital \$100,000
Reserve \$50,000

A. P. Buchanan, M. D.,
President
E. H. Merritt,
Secretary

DIRECTORS—A. P. Buchanan,
M. D., M. F. Porter, M. D., R. S.
Taylor, S. Foster, W. J. Vesey,
E. W. Cook, E. H. Merritt

THE Physicians Guarantee Company is a corporation organized under the laws of Indiana for the protection of physicians against suits for malpractice. It came into existence in response to the widely expressed wish of the profession for some means by which the united resources of its members could be made available against a common enemy.

It is recognized that the increasing number of claims for alleged malpractice in recent years is, for the greater part, the work of blackmailers, abetted by a class of lawyers willing to champion any cause for the chance of a contingent fee. A suit for malpractice, no matter how baseless in fact, is always an injury to the reputation and good name of a physician. The small circle of friends who know his innocence of the charge may be unmoved by it, but to the general public the mere bringing of the suit raises a presumption against the physician and does him a personal and pecuniary injury. It is the knowledge of this fact, and in the hope that the physician will pay something rather than submit to the annoyance and loss involved in defending a suit in court, that many false claims for damages are made. The mission of the Physicians Guarantee Company is to do something toward making an end to this buccaneering, by putting it within the power of every physician to provide himself with the means of making such vigorous defense against such claims as will not only vindicate him in his own case, but contribute to deter others from bringing like suits.

THE CONTRACT.

The company issues only one form and kind of contract. It provides that if the physician holding it is sued for damages for civil malpractice, the company will defend the suit for him. It will pay all expenses of attorney's fees, experts, witnesses and court costs to a limit of \$5000.00 in each case; and it will make this defense in all suits brought in which the cause of action arose during the life of the contract, no matter when they are brought, with only this limitation, that it shall not be bound to expend more than ten thousand dollars in defense of cases in which the cause of action arose in any one year of the life of the contract. That is to say, for every annual payment on his contract the physician has the obligation of the company to spend ten thousand dollars for him, if necessary.

The company will contest the case by all means known to law, and to the highest court to which an appeal can be taken, subject only to the limitation of five thousand dollars outlay in one case, and ten thousand dollars in cases arising from services rendered in any one year during the life of the contract.

The PHYSICIANS GUARANTEE COMPANY, - Home Offices, Fort Wayne, Ind.

Literature for Postal Card.

Mention this JOURNAL.

Geo. H. Field, M. D., Cal. Representative.

PLASMON

A NUTRITIOUS FOOD.

THE most concentrated form of nourishment for the strong, the weak, healthy and sick, old and young, discovered by the eminent chemist, DOCTOR SIEBOLD, and endorsed by the great chemist and medical authority, PROF. VIRCHOW. ❧ ❧

PLASMON is the most digestible and nutritious food known to medical science.

PLASMON is a light powder made from fresh milk, and is albumin in its purest and most natural form.

PLASMON is a muscle building, nerve sustaining food, easily digested and immediately assimilated by the most delicate system.

PLASMON in wasting diseases, chronic affections of the stomach, intestines and liver, diabetes, brings rapid and permanent recovery.

PLASMON is perfectly soluble, and may be mixed with any other food or beverage. It is tasteless, but makes every dish palatable.

PLASMON has a higher food value than any other food; added to other foods it greatly enriches their nourishment.

PLASMON may be used as a substitute for fresh meat and eggs. It is the cheapest form of pure nourishment known. One teaspoonful contains all the nutriment of one quarter pound of best beef.

PLASMON is recommended by the world's greatest physicians for invalids and convalescents.

PLASMON is not a substitute. It is itself Nature's nutriment.

For sale at leading Druggists and Grocers.

Samples to Physicians on application.

The American Plasmon Syndicate, Ltd.,
204 Crocker Building, San Francisco.

DEHYDRATINE

A Typical Poultice

ANTISEPTIC—A perfect dressing for pustular and eczematous eruptions (almost a specific for "poison oak.")

ABSORBENT—Relaxes the tension due to fluid in the inflamed tissues, allows a natural movement of blood through the affected region and eases the pressure on the sensory nerves.

ANODYNE—Relieves the burning pain of cutaneous disorders as well as distress due to inflammation far below the surface.

DEHYDRATINE—is all that a poultice should be and nothing else.

Furnished in cans at 35c, 50c, \$1.00 and \$2.00.

Samples and literature promptly on request.

The Dehydratine Company

47 First Street, San Francisco

Great Truths

"Of thorns men do not gather figs, nor of a bramble bush gather they grapes."

If you want to put fat *onto* the body of your patient, you've got to make him take fat *into* his body; and the most easily digestible, the most completely assimilable, the most highly nutritious form of fat,—is **HYDROLEINE**. It is pure Lofoten cod-liver oil, thoroughly predigested by pancreatin, and rendered so delectable as to be exceedingly grateful to the most delicate stomach.

Sold by druggists.

THE CHARLES N. CRITTENTON CO.,

Sole Agents for the United States.

Laboratory:

115 and 117 Fulton St., New York.

Samples sent to physicians free
on application.